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C & D

CHEMIST AND DRUGGIST

ESTABLISHED 1859

THE WEEKLY NEWSPAPER FOR PHARMACY
and all sections of the drug, pharmaceutical,
fine chemical, cosmetics, and allied industries

*Official organ of the Pharmaceutical Society of Ireland
and of the Pharmaceutical Society of Northern Ireland*

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CONTENTS

A Pharmacist's Anthology	545			
Branch Events	543			
Correspondence	544			
Definition of a "Shop"	...	...	537	
Dr. Wallis a Nonagenarian	...	...	539	
Glass Technology	...	...	536	
Guide to New Medicaments	...	...	551	
Hastings Branch Dinner (Cartoon)	...	...	542	
How Virus Vaccines are Controlled	...	...	548	
Leading Articles:—						
Too Much for One Doctor	...	...	545	
Too Useful to Shelve and Forget	...	...	545	
Making Pharmacy Known and Making it						
Better	...	...	536	
New Books	...	...	547	
New Products and Packs	...	...	541	
Pharmacy in West Africa	...	...	546	
Topical Reflections	...	...	535	
Trouble over an Over-large Dose	...	...	538	
Business Changes	...	538	New Films	547
Coming Events	...	555	Notes on Medicaments	554
Commercial Television	...	556	Overseas Visits	536
Company News	...	537	Patents	554
Contemporary Themes	...	556	Personalities	538
Deaths	...	538	Photographic Notes	541
Expansion Projects	...	539	Prescribers' Press	556
In Parliament	...	537	Print and Publicity	555
Instruments & Apparatus	...	549	Trade Marks	554
Legal Reports	...	537	Trade Notes	540
Manufacturers' Activities	...	540	Trade Report	552
New Companies	...	556	World Trade	555

Index to Advertisers, p. 4, Classified Advertisements, p. 17

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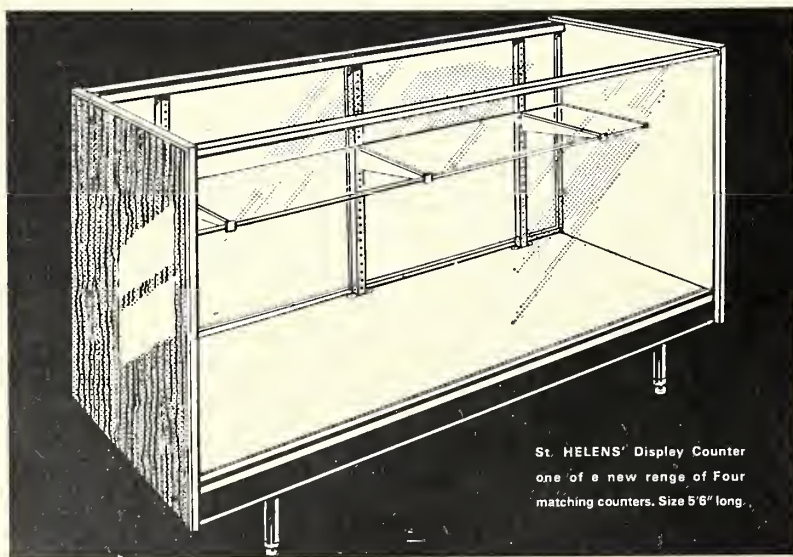
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C&D

CHEMIST AND DRUGGIST

Volume 186

DECEMBER 3 1966

No. 4529

Higher Hospital Costs

INCREASED WAGES AND SALARIES

AVERAGED over some 400 hospitals in England and Wales costs per patient per week increased by 11½ per cent. in the year ended March 31 above the corresponding figure for the previous twelve months.

Hospital Classification	PER IN-PATIENT PER WEEK			PER OUT-PATIENT PER ATTENDANCE		
	Drugs	Dressings	Indirect Dispensary Expenses	Drugs	Dressings	Indirect Dispensary Expenses
Type 1. Acute	s. d. 24 8	s. d. 7 11	s. d. 6 8	s. d. 2 0	s. d. 6 5	s. d. 5 5
Type 2. Mainly acute	19 9	5 10	5 9	2 2	5	6
Teaching acute, London	34 6	8 0	8 11	4 1	5	9
Teaching acute, provinces	33 7	8 6	8 8	2 2	6	6

About four-fifths of the increase is attributed to wage and salary increases and higher prices in 1964-65. In contrast costs per patient treated increased by only 6½ per cent., indicating that beds continue to be used more efficiently. Average weekly cost of an in-patient in a London teaching hospital during 1965-66 was £56 11s. 6d. (£50 14s. 3d. in 1964-65), in other hospitals the average was £39 11s. 11d. (£35 17s. 8d.). The cost per patient was: London teaching hospitals £110 9s. 6d. (£103 5s.), other non-teaching hospitals £65 14s. 9d. (£60 15s. 2d.). The details are given in the N.H.S. Hospital Costing Returns, year ended March 31, 1966, Part 1 (H.M. Stationery Office, price £1 15s.). The returns do not, on this occasion, include the detailed information from a further 200 hospitals in the Birmingham Region, using a revised costing system in which the

departmental costs are not directly comparable with those of hospitals in other regions. The Costing Returns show not only separate costs for wards and out-patient departments, but also detailed costs for other hospital departments, including details of the average costs of drugs, dressings and indirect dispensing expenses. Some of the information is given in the above table.

Purchase Tax

MORE "ESSENTIAL" DRUGS EXEMPTED

THE Commissioners of Customs and Excise have issued the Purchase Tax (No. 7) Direction, 1966, which temporarily exempts further "essential" drugs and medicines from tax. The effect of the Direction, which became operative on November 25, is to make the following additions and extensions to

the entries contained in the Schedule to the Purchase Tax (No. 1) Order, 1966 [where known the proprietary product is included in brackets]:—

HEAD 1

Hexachlorophane pastes prepared solely for internal administration for veterinary purposes which contain not less than 26 per cent. (by weight) of hexachlorophane as the sole active ingredient.

HEAD 2

Activated magnesium aluminium silicates mixed with calcium chloride, magnesium chloride, potassium acetate, sodium acetate, and sodium chloride, prepared for veterinary use;

Alcuronium chloride [Alloferin];

Carbinoxamine maleate mixed with pseudo-ephedrine hydrochloride [Extill];

Clioquinol, mixed with 5-(p-aminobenzenesulphonamido)-3-methyl-1-phenylpyrazole, N'-(6-chloro-3-pyridazinyl)-sulphanilamide and ethinyloestradiol, prepared for veterinary use;

Clomiphene citrate [Clomid];

Dihydroxyaluminium glycinate;

Guaiphenesin, mixed with codeine phosphate and pheniramine maleate [Robitussin A-C];

Methsuximide;

Nalidixic acid mixed with kaolin;

Pargyline hydrochloride [Eutonyl];

Preparations comprising the dried, defatted pancreas of the pig, together with cellulase and ox bile extract;

Salicylamide mixed with paracetamol.

In Head II the entry relating to "Deptopine citrate . . ." which was included in the previous (No. 6) Direc-



"FELLOWS" RECEIVE THEIR CERTIFICATES: Surgeons from Ceylon, India, Nigeria and the Sudan, holders of 1966 Smith & Nephew Fellowships, seen at a reception at the company's London offices at which they were presented with certificates to mark their award and the end of their Fellowship year. In the group with Professor Hedley Atkins (president of the Royal College of Surgeons of England) are Messrs. S. A. Trivedi, India; A. R. M. Ahmed, the Sudan; L. S. Attiygalle, Ceylon; S. F. Wickramasinghe, Ceylon, and J. O. Oluwasanni, Nigeria. Also in the group are Messrs. G. E. Leavey (president, Smith & Nephew Associated Companies, Ltd.) and C. A. F. Hastilow (chairman).

tion is now amended to "Deptropine citrate, whether or not mixed with isoprenaline hydrochloride;" [Brintona].

The Treasury will, in due course, be asked to make an Order which will give permanent statutory effect to all the above changes.

Hospital Admissions

RISE IN THOSE DUE TO POISONS

PART I of the report on the Hospital In-patient Inquiry for the year 1962 (H.M. Stationery Office, price 22s.), just published, includes detailed tables derived from a 10 per cent. sample of discharges and deaths in N.H.S. hospitals in England and Wales (except those for psychiatric, preconvalescent and convalescent patients). The tables show that the number of admissions to hospitals due to the "effect of poisons" has continued to increase, the totals for 1958, 1959, 1960, 1961, and 1962 were 17,500, 20,200, 23,310, 27,890 and 33,586, respectively. The following are the groups of poisons concerned and the number of estimated cases in 1962—the figures for 1957 are given in parenthesis:—Noxious food-stuffs 94 (70); alcohol 408 (140); petroleum products 617 (390); industrial solvents 512 (340); corrosive aromatics, acids and caustic alkalis 815 (400); mercury and its compounds 31 (40); lead and its compounds 188 (50); arsenic and antimony compounds 31 (60); carbon monoxide 2,654 (1,900); other gases and vapours 324 (180); morphine and other opium derivatives 627 (270); barbituric acid and derivatives 12,091 (6,200); aspirin and salicylates 6,186 (2,200); bromides 31 (40); other analgesic and sporic drugs 2,462 (440); sulphonamides 63 (80); belladonna hyoscine and atropine 282 (130); venom 178 (260); unspecified 6,092 (2,500). There were 1,014 (900) cases of adverse reaction to therapeutic injections, transfusions etc., and 13,690 (12,200) cases of adverse reaction to "other therapeutic products." The report shows that 4,020,648 persons were discharged from hospitals in England and Wales during 1962. In 1958 the total was 3,554,700.

"Nomen Proprium"

MEDICAL COMMITTEES IN FAVOUR

OVER two-thirds of all Local Medical Committees consider that all medicinal containers should be labelled with their contents when dispensed unless the prescriber expressly wishes to the contrary. That was reported by Dr. J. C. Cameron to the general medical services committee of the British Medical Association on November 17 following a postal inquiry in July. Ninety-three of the committees voted in favour of labelling; forty-two that containers should be labelled with their contents only when the prescriber so requested.

New Standard

PLASTICS MEDICINE MEASURES

A NEW part of the British Standards for medicine measures, published recently, covers a smaller size of plastics medicine measure. B.S.3221: Part 5: 1966—*Specification for medicine measures: Plastics Medicine*

measures of 10 mil. Capacity—follows the first four parts of that standard, which applied respectively to glass medicine measures of 50 and 30 mil capacity, plastics medicine measures of 50 mil capacity, and plastics medicine spoons of 5 mil capacity. The Standard has been prepared to take account of the increasing use of metric measures for doses of medicine, particularly for domiciliary use. The specification covers the capacity, design, strength, freedom from toxicity, graduation, resistance to hot water, detergents, stains and anti-septic solutions, and marking, with an illustration. Manufacturers of plastics medicine measures conforming to the standard may apply to the British Standards Institution to use the BSI "Kite mark" on them. Copies of B.S.3221: Part 5 may be obtained from BSI sales branch, 101-113 Pentonville Road, London N.1. Price 3s. each (postage 6d. extra to non-subscribers).

SCOTTISH NEWS

N.H.S. Remuneration

STAGE OF CURRENT NEGOTIATIONS

LEGAL action was at one time contemplated to secure arbitration on Scottish chemists' National Health Service remuneration, according to the annual report of the Pharmaceutical General Council (Scotland). Following the report of Associated Industrial Consultants, Ltd., on chemists' income and expenditure, the staff and management sides of the Pharmaceutical Whitley Council agreed in June to refer their differences to an independent tribunal. Later the management side declined to proceed because of the Government's White Paper on prices and incomes. On October 20 the staff side called upon the management side to honour the arbitration agreement on the original terms of reference, and since then the management side has agreed to proceed on the basis that both sides would be able to put their respective views on the White Paper before the tribunal at the appropriate time. The tribunal's chairman is Mr. J. P. H. Mackay, Q.C., and its other members are Mr. G. D. H. Dewar, C.A., and Professor A. D. Campbell (professor of applied economics, Queen's College, Dundee). The two sides are preparing agreed evidence and will seek the opinion of the tribunal on how outstanding matters should be presented. During the first year (to June) of operation of the new drug testing scheme, 978 samples were taken from about two-thirds of the country's pharmacies. Proprietary preparations accounted for 652, official preparations for 311 and dressings for fifteen. Only six samples were faulty and two of these were for proprietary preparations, the faults being taken up with the manufacturers concerned. About 5 per cent. of containers used were not up to the standards recommended by the Pharmaceutical Society, and in particular folding cartons which were used on twenty-five prescriptions for tablets and capsules, showed their unsuitability for use over extended periods.

IRISH NEWS

THE REPUBLIC

New Licentiatees

NOVEMBER EXAMINATION SUCCESSES

THE following candidates have passed the forensic pharmacy examination of the Pharmaceutical Society of Ireland held on November 18 and have thus completed the Licence examination:—T. V. Walsh; J. N. Vallabhjee; Margaret M. Reen; Mary T. C. Heffron; Mary P. McGrath; Geraldine Good; Bridget F. Green; M. J. Kennedy; Blathnaid A. Hughes; Mary E. Power; J. J. Holly. The following were successful in the autumn Second Professional examination:—Bridget Collins; J. Pearce-Biney, J. O'Dwyer and R. Cusack.

Kerry Association

SECRETARY AND "A NEW ERA"

CONFIDENT that chemists were "on the threshold of a new era," Mr. B. R. Smith (secretary, Irish Drug Association) appealed for continued support for the Association's Committee when he addressed members of the Kerry Chemists' Association at Tralee on November 6. The I.D.A.'s newly appointed liaison officer (Mr. O'Donoghue) would, he said stimulate a new approach to members' problems. The meeting elected the following officers for 1966-67 — *Chairman*, Mr. D. Sheahan, Killarney; *Secretary*, Mr. J. Walsh, Dingle; *Treasurer*, S. O'Donoghue, Tralee. Arrangements were made to hold the annual dinner at Benner's hotel, Tralee, on December 4.

Call to Reorganise

WEST OF IRELAND RESOLUTION

THE annual meeting of the West of Ireland Chemists' Association held in Tuam on November 13 adopted a resolution from Mayo Chemists' Association, requesting that local associations should be reorganised. The resolution referred to the need for uniformity in hours of opening, to changed trends in distribution, price cutting, the need for strict observance of prices of all coded prescriptions; the indiscriminate selling of certain items without prescriptions, and the practice of not charging a prescription fee on certain lines. The meeting agreed that all those matters should be investigated without delay. At the meeting the Association's officers were elected as follows: M. Doherty, Foxford, *Chairman*; M. J. O'Donnell, Westport, *Vice-chairman*, and P. J. Kilgariff, Tuam, and Mrs. G. Guickian, Sligo, joint *Secretaries*. The president of the Pharmaceutical Society of Ireland (Mr. M. L. Cashman), reviewing the position in relation to the White Paper on the Health Services, referred to concern felt by pharmacists at the extended number of hardship cases receiving medicines through dispensaries. It was agreed to approach the Department of Health to see whether a temporary arrangement could be made under which such cases would obtain their requirements through community pharmacies.

OVERSEAS NEWS

UNITED STATES

'Too Many Unsafe Drugs'

AN official of the United States Food and Drugs Administration is reported by the *Financial Times* (November 29) to have said at a conference in Washington, 'In spite of efforts by the drug industry to produce safe and legal products, too many unsafe drugs are finding their way to the market place.' He described the situation as 'intolerable.' He cited the upward trend in drugs recalls—less than 70 a year before the Kefauver-Harris amendment of 1962; 110 in fiscal 1964; 340 in 1965; 449 in 1966. While those figures show better detection, they also underline the considerable concern felt at the moment, both by the F.D.A. and by the industry.

NEWS IN BRIEF

PAYMENT of the new supplementary benefits under the Ministry of Social Security Act 1966 began on November 28.

THE first two of the new series of Board of Trade publications about the Development Areas in the United Kingdom have been issued. They are a small brochure "The Case in Brief" and a booklet "Government Help for your Business in Development Areas."

FOR "research in hypertension in the professorial medical unit" University College Hospital Medical School, London, have been bequeathed the residue, after disposal of personal legacies, of the estate of Mrs. E. M. Egerton, Muswell Hill, London, N.10.

OF the adult population between the ages of eighteen and sixty-four 7-8 per cent. is potentially in the market for private health schemes, according to a survey carried out by British United Provident Association. The Association estimates the demand would be doubled if the Government were to grant scheme members some concessions, such as tax relief.

THE Society of Chemical Industry's medal for 1967 has been awarded to Mr. Leonard Hynes (a past chairman of the Canadian section and president of Canadian Industries, Ltd., Montreal). The senior award of that Society, the medal is presented biennially and in 1967 will be presented to Mr. Hynes at Expo 67 in Montreal when he will deliver his medal address.

A GIFT of 40,000 doses of tetanus vaccine donated by Glaxo Laboratories, Ltd., Greenford, Middlesex, has been flown to the aid of flood victims in Italy by the British Red Cross Society and Save the Children Fund. The company have also given a consignment of Complan to help relief work in disaster areas of southern Austria. Parke, Davis & Co. have also donated supplies of typhoid and paratyphoid vaccine, and of tetanus antitoxin.

Two tons (value £500) of baby foods and baby syrups have been sent to the headquarters of the Italian Flood Relief Fund in Florence by Robinson's Baby Foods (J. & J. Colman, Ltd.), Canoro Works, Norwich.

TOPICAL REFLECTIONS

By Xrayser

Looking Back

It is not given to all of us to have another look at our thoughts of twenty-five years ago, nor to assess, in the light of the experience of a quarter of a century, how closely events have followed our prophecies. Your contributor Mr. D. I. Tuddenham (p. 524) has been given that opportunity, for he was courageous enough to accept an invitation to comment on pharmacy as he saw it as a recently qualified man in 1941. His re-examination makes extremely interesting reading, and what struck me was that, in that dark year of our history, he was able to look forward at all. If, as he says, he finds some of his forecast wide of the mark, he should not be unduly despondent on that account. War has a habit of producing upheaval, and it became obvious that, as the weary years went on, there would be vast changes in the pattern of life as a whole, and that pharmacy would have its part in the new world. I have tried, from a much greater distance in time, to look back on my life at the same period "when I was young and twenty without a single care," as the poet wrote, but I find some difficulty, for I have to rely on recollection. That is much less reliable than the printed word of Mr. Tuddenham. But I do recall vividly that, unlike the hero of the poem, the new pharmacist of the period had cares enough. His chief anxiety was to find an opportunity to make use of the skill and knowledge which his certificate acknowledged. (The certificate was not fulsomely worded, for it stated in a grudging sort of way that its possessor had "sufficient" skill and knowledge, an expression which implied that you had got there by the skin of your teeth.) I counted myself lucky to find a post after only two months, and I have not forgotten that there were others less fortunate who had to leave their newly acquired diplomas at home and seek alternative employment that took no account of their special skills. If some of that number, not deficient in skill or personality, had been asked to say what they expected of pharmacy, the answer would have been "a job."

Plan for the Future

It must be difficult for the young pharmacist of today to comprehend the conditions described in the first paragraph, but they existed, and they contributed to the malaise of pharmacy for many years to come. They were the cause of the establishing of many new pharmacies, whose existence could not be justified on the grounds of public need, and certainly not on economic grounds, for they provided little more than a subsistence for their owners and, in many cases, reduced the value of existing businesses. Pharmacy has not yet recovered from the circumstances of that time. The age produced an excess of pharmacies, and many of those who were driven to add to the number are now reaching the age of retirement and are finding that their life's work is not a saleable commodity. Unplanned "limitation" is the result, from hardship at life's beginning, struggle during some of the years, and further hardship at the end of a long career. The future of pharmacy, and the life career of the young graduate of today, must not now be left to chance. Every effort of thought and action must go into "planned distribution," for we are seeing daily the sad results of uncontrolled development. Many of those to whom I have referred have given much to pharmacy, and their reward has been small. We must press forward to implement the admirable intentions of the report on the General Practice of Pharmacy, if possible helping the veteran who finds himself in an impossible position today.

Locums and Laughter

Mr. J. P. Kerr's letter (p. 520) on the subject of locum fees to members of the N.P.U. Executive does credit to his sense of humour. But I am puzzled. Did the figure of £5,000 mentioned from the platform refer to the total for one year? Or for one meeting? Or each member for one year? Or, perhaps, for each member for each meeting? So often, owing to some slight omission, we miss the point of the joke, and only laugh out of politeness.

Making Pharmacy Known and Making it Better

MR. GROSSET ADDRESSES LIVERPOOL CHEMISTS

WHETHER or not they liked the concept of planned distribution of pharmacies in the United Kingdom, pharmacists should, in the public interest, consider it as a matter of urgency. The dispensing and supply of medicines was an important and integral part of the health services, and as such its development must not be left to chance.

That was the view put forward by Mr. JOHN B. GROSSET (past-chairman of the Practice Committee) at a meeting of the Liverpool Chemists' Association and Branch of the Pharmaceutical Society on November 7. "We, as a profession," he said, "must show that we can face up to our responsibilities by organising ourselves to provide and maintain a comprehensive pharmaceutical service to the nation." Mr. Grosset warned that to do so was not going to be easy. Even though there were more pharmacies in the country than might be thought desirable, it did not follow they were properly sited. Since 1954 there had been a gradual reduction in the number of pharmacies, the net drop reaching 1,200. Biggest loss (260) came in 1965. Taking into account the cumulative effect of revaluation of property, the steep rise in rents, area redevelopment, shortage of staff, reducing turnover and selective employment tax, it needed no prophet to predict an acceleration in the process of decline.

In the report on the general practice of pharmacy a positive approach had been adopted to the concept of planned distribution. One of the major problems was to gain recognition in many important quarters, local-authority circles being one. This was a most important sphere if planned distribution was to be attained. Pharmacists had to get down to the hard work of making local authorities recognise that pharmacy had to be considered in the redevelopment of cities and the building of new towns. It was an uphill battle but, with sufficient drive and determination on the part of local pharmacists, it was possible to gain the recognition that there was in each area a Pharmaceutical Committee capable of determining the area's needs. In Newcastle and Manchester the battle for recognition had already been fought and won. Branches would be receiving from the Council a memorandum giving the background of the problem and advice on gaining recognition from local authorities and planning committees.

A Many-Sided Problem

Much thought had obviously to go into many facets of that complex problem—the position of the multiples and Co-ops; allocation of sites in favoured positions; rehousing of dispossessed proprietors; establishment of group pharmacies; whether pharmaceutical services should or should not be provided within a health centre; and the problems facing a young pharma-

cist wishing to become an owner.

The Practice Committee was at present engaged in an investigation of pharmacy in European countries, an inquiry that could provide the solution to the United Kingdom's problems.

Mr. Grosset suggested that British pharmacists might like to operate the Swedish system, in which each pharmacy contributed to a pool a sum of money determined by the turnover and the taxable profits of the business. The pool was used to subsidise the smaller pharmacies so as to assure a guaranteed level of income. The pharmacists assisted could apply for promotion to proprietorships in the next turnover group.

In France, apart from the obvious difference in practice compared with the U.K., he had noticed another important reason for their sound economic position—that a professional act was charged, or a pharmaceutical sold, at almost three times the British price. "The manufacturers print the retail price on each article, and there is no price cutting," he added.

The whole problem of Britain's possible entry into the Common Market presented a challenge which the Society

must meet. Although he was not able to give any indication what modifications in British pharmaceutical practice and control would be necessary if Britain was to enter the Market, two obvious areas of difference needed to be dealt with. One was the position of the multiples and Co-ops in Britain, as against the general rule in Europe of one man, one pharmacy; and the other multifarious array of non-traditional and non-pharmaceutical activities undertaken by some British pharmacists. "I would imagine," he commented, "that even some of the 'traditional' activities permitted by the G.P.P. report will cause the Continental eyes and hands to be raised in horror."

As was always the case in life, the result would be a compromise. "However, the prospect of tidying up our pharmacies before joining our European cousins is one which I commend to you. Each of us must become conscious of what is bad for our own image in the conduct of our pharmacies. We must strive to improve the standard of our pharmacies in keeping with our declared aim of recognition as responsible professional people."

GLASS TECHNOLOGY

Society's golden jubilee celebrated in Sheffield

THE golden jubilee of the Society of Glass Technology was celebrated in Sheffield on November 8 and 9 with a series of events at Sheffield University and the laboratories of the British Glass Industry Research Association. When the Society was founded its affairs were directed from the University department of glass technology and that same department later gave birth, in 1955, to B.G.I.R.A., which is housed in an adjacent building. Close links between the organisations have continued.

Both B.G.I.R.A. and the department of glass technology held open days with exhibits showing many aspects of teaching and research in glass manufacture and use. For the department the occasion was marked by the formal opening of a new wing of the laboratory accommodation by Mr. A. W. Clark (president of the Society of Glass Technology). Mr. Clark was also the recipient of an honorary D.Sc. degree of Sheffield University at a ceremony on November 9 (see p. 538).

An exhibition describing the developments in glass technology during the life of the Society (its birth is said virtually to have coincided with the dawn of the subject as a recognised science) was sponsored at the City Museum, Western Park, Sheffield.

Included in the research that was being demonstrated at B.G.I.R.A. was work on the coatings being used to produce abrasion-resistant glass containers. One of the difficulties arising from the introduction of high-speed filling lines has been that, in rubbing against one another, bottles may become scratched on the surface, render-

ing them more liable to fracture during use. It has been found that abrasion is greatly reduced if the containers are passed through a mist of organic metallic compounds (tin or titanium) immediately after forming. During the annealing process the compound diffuses into the glass surface and a stronger container results. Work in the laboratories has demonstrated a considerable improvement in the bursting pressure and vertical load properties of treated containers in comparison with untreated and friction between the containers has been found to be reduced by a factor of 3.

Another aspect of the laboratories' work is in the ability of glass to resist chemical attack. An investigation is in progress, for example, to determine the effects of cleaning and sterilisation methods on coloured enamels used to mark hypodermic syringes. Similar work is being applied to the more recent silver staining methods in which the mark becomes part of the glass.

OVERSEAS VISIT

MR. D. S. CRACKNELL (managing director, Food Brokers, Ltd.), left London on December 1 to attend the sixty-third National Food Brokers' Association annual convention in New York, U.S.A. Mr. Cracknell will then be travelling on to Miami Beach, Florida, to attend another international conference arranged by the Coppertone Corporation. The chemist broker division of Food Brokers, Ltd., has represented Coppertone in the United Kingdom for the past four years.

IN PARLIAMENT

BY A MEMBER OF THE PRESS GALLERY, HOUSE OF COMMONS

ABOUT 6,000 complaints of price increases had been received by Government departments, said MR. WILLIAM RODGERS (under secretary of State for Economic Affairs) in a reply to questions by MR. D. J. WINNICK and MRS. M. THATCHER on November 24. In a written answer on November 25 MR. DOUGLAS JAY (President, Board of Trade) informed MR. W. J. BIFFEN that 200 complaints had been received about prices of toilet preparations.

Labelling of Food Bill

MRS. JOYCE BUTLER introduced on November 22 her Bill to provide for the labelling of food and toilet preparations. The Bill, which has all-party support, is similar to that which she sought to introduce during the previous Parliament (see *C. & D.*, January 8, p. 35).

Sainsbury Committee

MR. ELDON GRIFFITHS asked the Minister of Health when he expected to receive the Sainsbury Committee's report on the pharmaceutical industry's relationship with the National Health Service. MR. ROBINSON, in a written reply on November 25, said "Probably about the middle of next year."

Hospital in-patients

When MR. ROBINSON on November 28 told DR. J. E. DUNWOODY that the average length of stay in acute general hospital beds had fallen from 18.2 days in 1955 to 12.7 days in 1965, MR.

PATRICK JENKIN was quick to suggest the Minister should agree that figures were a remarkable tribute "to the researchers and others in the drug industry to whom a great deal of the credit needs to be given." MR. ROBINSON agreed that advances in techniques "including chemotherapeutic techniques have contributed to this, but that is only one of a number of factors."

Brain Report

DR. MICHAEL WINSTANLEY asked the Minister of Health what progress has been made in implementing the recommendations of the Brain Report on drug addiction. MR. KENNETH ROBINSON (Minister of Health) in a written answer on November 24 said "a conference of doctors experienced in the treatment of drug addiction has considered some of the medical problems relating to provision of treatment centres, and the further development of hospital treatment facilities is being discussed with hospital authorities. One or more units for research into the problems of drug dependence are being planned. Proposals for legislation on the compulsory notification of addicts and on the limitation of doctors' authority to prescribe or supply heroin and cocaine to addicts have been put before the medical profession and I await their comments." MR. Robinson added that the advisory Committee on Drug Dependence would meet so soon as possible.

DEFINITION OF A "SHOP"

Pharmaceutical Society wins appeal

THREE High Court judges allowed an appeal by the Pharmaceutical Society on November 25 against a decision by the Wigan borough magistrates, who earlier in the year had discussed a summons brought by the Society under the Pharmacy and Medicines Act, 1941, against Mr. David Whelan, a stallholder outside the Wigan market hall. Mr. Whelan had sold Angiers junior aspirin to an inspector appointed by the Pharmaceutical Society of Great Britain. The case has been remitted to the justices with a direction to convict Mr. Whelan.

Giving judgment, the Lord Chief Justice (Lord Parker) said that Mr. Whelan had a tenancy agreement with the Wigan Corporation, paying a weekly rent of £12 for a stall within the general area of the market and consisting of a tubular steel framework and canvas awning. The stall was equipped with an electric light and an electric sign, and mail addressed to Mr. Whelan had been delivered to the stall from the Post Office. The point to be decided was whether the market stall was a "shop" within the meaning of the Pharmacy and Medicines Act, 1941.

The stall of Mr. Whelan was portable and the stock was removed at night. Business was carried on for five days a week throughout the year except for two days during the annual Wigan

fair, when the stall was removed bodily. Otherwise it was always in the market area in the same place, which was defined by a painted white line on the ground. Although the stall had a degree of permanence, said Lord Parker, it did not amount to a shop. The stall was not "premises" on which any retail trade or business was carried on within the meaning of the Shops Act or the Pharmacy and Medicines Act, 1941. The Pharmacy Act was intended, among other things, to enhance pharmacy, and it was dealing with premises that could properly be described as "registered premises." Lord Parker referred to other statutes and to the Shop Hours Act, 1892, in which "shop" was defined as "retail and wholesale shops, market stalls, and warehouses in which assistants were employed," but in the Shops Act, 1912, he pointed out, shops and warehouses came out of the definition, and market stalls were considered as "a place other than a shop."

In the *Summers v. Roberts* case it had been suggested that the definition of a shop in the Pharmacy and Medicines Act, 1941, should be read as including, in addition "to that which is a 'shop' in the natural meaning of that word a permanent place with limits which can be defined precisely, in which or on part of which there is some sort of structure where

regular retail trade can be carried on." Lord Parker considered that at least those requirements were necessary. He did not feel it was the test to apply in this case. On what the test ought to be he would not venture to express an opinion. It was sufficient for the present case to say that anything that would generally be called a "stall," and would have been covered by the definition in the Shop Hours Act, 1892, was now a "place other than a shop." The Lord Chief Justice said he had great sympathy with the justices, and up to a comparatively late stage of the appeal he had thought they were right, but he was now satisfied that they were wrong. Mr. Justice Widgery and Mr. Justice O'Connor agreed. Costs were awarded against Mr. Whelan.

LEGAL REPORTS

Stole from Employers

A MAN who stole from his employers for a period of two years appeared at North London court on November 24 and was remanded in custody until December 15 for reports. Brian Fletcher, aged twenty-four, a laboratory assistant, Stoke Newington, pleaded guilty to stealing a quantity of cosmetics worth £200 from his employers Newbery & Phillips, Ltd., Farleigh Road, London, N.16. A police officer told the court that the defendant had been stealing cosmetics from the company for about two years and when seen by an officer had admitted the offence. Earlier in the day Leslie Cottelli, aged twenty two, Stoke Newington had pleaded guilty at the court to receiving the same cosmetics knowing them to have been stolen. Cottelli told the court "I realise now I was in the wrong and wouldn't do it again." He also was remanded for reports until November 15.

COMPANY NEWS

Previous year's figures in parentheses

UPIOHN, CO. (U.S.A.).—Sales for nine months ended September 30 totalled £68,602,857, an increase of 7.7 per cent. Earnings over the same period in 1965 totalled £10,485,357—an increase of 11.4 per cent. An increase of 15 per cent. in research and development expenditure as compared with 1965 is also recorded.

DUNBEE-COMBEX, LTD. — The company are to raise further long term capital by the issue of £350,000 7½ per cent. debenture stock 1988-93 at £97 10s. per cent. and by the issue of 205,000 Ordinary shares of 2s. each at 12s. 6d. per share, the latter are being provisionally allotted to holders in the proportion of one new share for every ten held. Consolidated net profits, before tax, for 1966 are expected to be not less than £200,000. If realised the directors propose to recommend the payment of a dividend of 43 per cent.

LAPORTE INDUSTRIES, LTD. — Group net sales, excluding inter-company sales for half-year ended September 30 were £15,818,000 (£14,058,000 in the same period of 1965). Trading profit was £3,189,000 (£3,003,000) and profit before taxation,

£1,807,000 (£1,650,000). The directors say that although there is a trend to lower profit margins, reduction in the losses of Howards of Ilford, Ltd., and Laporte Titanium (Australia), Ltd., have made a substantial contribution to the improved results. An interim ordinary dividend has been declared of 3 per cent. (same).

IMPERIAL CHEMICAL INDUSTRIES, LTD.—Group sales to customers in the first nine months of the year are valued at £667m. (against £609 in the same period of 1965). Income before tax, is £68m. (£77m.) while tax at £27m. is £9m. higher than for the equivalent period. Group income after tax applicable to parent at £40m. shows a fall of £16m. Sales in the home market during the period were 8½ per cent. higher in volume and 7 per cent. higher in value than in the first nine months of 1965. Exports at £115m. f.o.b. were about 2½ per cent. higher although their volume was 7½ per cent. higher.

FISONS, LTD.—Lord Netherthorpe (chairman) said at the annual meeting on November 28 that, in the past few weeks, the company had found it possible to eliminate projects costing £1.9 million from capital commitments of £11.3 million referred to in the annual review. On the experience of the first five months he could not be optimistic about the results of the current financial year, but there were certain encouraging signs. The Government now recognised the justification for the price increases not only to cover higher costs of imported raw materials but to bring the receipts of an enterprise to a level adequate to maintain efficiency and undertake necessary investment. Until the national economy resumed its growth the full benefits from the company's large capital investment would not be secured.

Voluntary Liquidations

B. REDFORD, LTD., retail chemists [R.O.] 485A Cheetham Hill Road, Manchester, 8. Liquidator: L. R. Wilkinson, F.C.A., Bedell & Blair, 79 Mosley Street, Manchester, 2.

NEWMAN KIMBERLEY ENTERPRISES, LTD., aerosol manufacturers, [R.O.] 10 New Square, Lincoln's Inn, London, W.C.2. Liquidator: Norman Barrington Cook, 19 Eastcheap, London, E.C.3.

BUSINESS CHANGES

MR. J. D. TOMBS, M.P.S., has acquired the business of W. M. Laxton (Kendal Parade), Ltd., at 14 Kendal Parade, Silver Street, London, N.18.

MR. H. PROCTER-SMITH, M.P.S. (formerly proprietor of Grays, 41 Duke Street, London, S.W.1.) has taken over the pharmacy of the late Mr. Harry Clegg, M.P.S., 3 The Square, Holsworthy, Devon. The pharmacy, which has been established over 100 years will continue to trade as Harry Clegg.

Appointments

LONDON RUBBER INDUSTRIES, LTD., Hall Lane, London, E.4, have

appointed Mr. G. Cockburn their sales representative for North and East Scotland.

KELDON, LTD., Wadsworth Road, Perivale, Middlesex, have appointed Mr. R. G. J. Nottage, their representative for South-east England. Mr. Banham who previously covered the territory has been appointed area manager for the southern part of the country.

The Warner-Lambert group of companies, Eastleigh, Hants, have made the following appointments: Mr. L. A. Thomas, general sales manager, toiletries division; Mr. J. R. Robson sales manager, Richard Hudnut, Ltd.; Mr. B. A. Tate, new products manager, toiletries division; Mr. K. S. Coldman, brand manager for Hudnut and Dabarry products.

PERSONALITIES

MR. A. W. CLARK, O.B.E., who received an honorary D.Sc. degree at Sheffield University on November 9 (see p. 536), is president of the Society of Glass Technology in its golden jubilee year. Mr. Clark is chairman and managing director of Beaton Clark & Co., Ltd., Rotherham, and holds office as president of the Yorkshire Glass Manufacturers' Association.

PROFESSOR G. W. THORN, an internationally famous endocrinologist, was invited by the Royal College of Physicians to be the first Lilly lecturer to the United Kingdom. Professor Thorn recently presented papers in London at the Royal College of Physicians and University College Hospital, and in Newcastle upon Tyne at the Royal Victoria Infirmary.

TROUBLE OVER AN OVERLARGE DOSE

A pharmacist acts "in best interest of the patient"

WHEN recently a London medical practitioner complained that a pharmacist had altered his dosage instructions, he was told by the Inner London Executive Council that the pharmacist had acted in the best interest of the patient. The prescription had called for an extra large dose which had not been initialled or underlined.

The doctor's complaint to the benefits committee of the Executive Council was that, after prescribing tabs. promethazine hydrochloride 5 mgm. t.d.s., he had found on his next visit that the patient was worse, and that he was "in early heart failure." The patient had told him the chemist had described the prescription as incorrect and dangerous; he was not to take two tablets three times a day but one tablet night and morning. The doctor held the pharmacist responsible for the deterioration in the patient and had reported the matter. Later he had drawn the Council's attention to a letter he had received from the head office of the pharmacy concerned, pointing out that pharmacists were taught that it was their duty to ensure that no patient received an overdose and that, for practical purposes, an overdose was considered to be anything greater than the maximum dose set out in the British Pharmacopoeia. If

what appeared to be an overdose on a prescription was not emphasised by being underlined or initialled, the pharmacist was supposed to contact the doctor, and if unable to do so would reduce the dose to the maximum given in the Pharmacopoeia. The company held that the manager at the pharmacy, in the circumstances prevailing at the time, had had little choice.

They apologised, however, for the fact that the branch manager had discussed the matter with the patient, and had pointed out to him that that was something he should not do. The doctor had replied stating that he had prescribed promethazine hydrochloride since 1951 for the same purpose and in the same dosage and there had been no harmful effects. He had never regarded 50 mgm. of promethazine hydrochloride as anything but a normal clinical dose. To his knowledge it had never caused any toxic effects. In his thirty years of medical practice he had never once met a chemist who had ventured to override a doctor's considered decision without permission from the doctor. For a chemist not to refer the matter to the doctor and to alter the prescription was a breach of the normal confidence between doctors and pharmacists.

The general benefits committee

DEATHS

DEAN.—On November 11, Mr. John Alwyn Dean, 67 Horninglow Road, Burton-on-Trent, Staffs. Mr. Dean qualified in 1934.

DUNLOP.—On November 13, Mr. James Frew Dunlop, M.P.S., 31 Milton Avenue, Liverpool, 14, Mr. Dunlop qualified in 1921.

IRELAND.—Recently, Mr. James Robert Ireland, M.P.S., 16 Skelton Crescent, Crossland Moor, Huddersfield, Yorks. Mr. Ireland qualified in 1947 and was in business at Market Street, Milnsbridge, near Huddersfield. He was a former chairman of the Huddersfield Chemists' Association and of the Society's Branch.

NEALE.—On November 9, Mr. Arthur Harold Neale, M.P.S., Chy Vean, Carrallack Terrace, St. Just, Penzance, Cornwall. Mr. Neale qualified in 1934.

PENNINGTON.—On November 11, Mr. John Henry Pennington, M.P.S., 424 Edge Lane, Liverpool, 7, Mr. Pennington qualified in 1929.

REES.—On November 18, Rev. Ebenezer Rees, Glan-Tivy, The Ridgeway, Enfield, Middlesex, aged ninety-seven. Rev. Rees qualified as a chemist and druggist in 1893. In 1901 he moved from Cardiganshire to London and soon afterwards began to study for the Congregational ministry. He retained his membership of the Pharmaceutical Society until the 1930's.

WILSON.—In the Royal Masonic Hospital on November 27, Mr. Stanley Harold Wilson, aged fifty-two. Mr. Wilson was chairman and managing director of W. Sutton & Co. (Druggists Sundries London), Ltd.

decided that the matter should, under the regulations, be referred to the pharmaceutical service committee, and the matter was subject of a hearing at which the deputy superintendent pharmacist and the manager of the branch pharmacy attended. The Clerk read out the terms of service requirement to supply drugs as ordered and also to indicate the dosage on the label. The Pharmacopoeia, he pointed out, stated that the medical practitioner would exercise his own judgment and act on his own responsibility in respect of the amount of any therapeutic agent he prescribed and the frequency of its administration. When, however, an unusually large dose appeared to have been prescribed it was the duty of the pharmacist to satisfy himself that the prescriber's intention had been correctly interpreted. The statements of doses of some preparations contained an instruction showing what dose must be dispensed in the absence of definite instructions from the prescriber.

In evidence the branch manager concerned said he had telephoned the doctor when the prescription was presented (just after noon) to confirm the dosage prescribed, but was advised that the doctor would not be available until 1.30 p.m. The patient said he

had previously had one tablet twice a day. The manager agreed he had made no further attempt to speak to the doctor, but said he had advised the patient, if in doubt whether the dosage was incorrect, to contact the doctor. He denied advising the patient that the dosage prescribed was incorrect and dangerous, but agreed he might have done more to contact the doctor. He considered, however, he had acted in the best interests of the patient.

The medical practitioner said that neither his housekeeper nor his receptionist could remember whether or not the chemist had telephoned. He felt that the manager had acted in good faith, but was aggrieved at the letter from the head office of the company.

The Committee's findings were that, as it was usual for doctors to initial prescriptions of extra large doses, the branch manager of the pharmacy had acted in what he considered the best interest of the patient, though it might have been advisable for him to have made more effort to contact the doctor before altering the dosage instructions. The Committee held that the chemists were not in breach of their terms of service and recommended that the case should be dismissed. The Minister has noted the Council's decision.

ferred to one of his well known contemporaries. Dr. Wallis quickly replied: 'He's younger than me, you know!' May his distinguished career long continue!

From PROFESSOR J. M. ROWSON
(head of the department of pharmacy, Bradford University)

NINETY years young and still going strong! Heartiest congratulations to you, Dr. Wallis, on your ninetieth birthday; coupled with the hope that you will now go on for the century. Pharmacognosy and the allied sciences owe much to your outstanding work throughout very many years. Your example has been, and still is, an inspiration to us who follow in your steps.

From DR. E. J. SHELLARD
(reader in pharmacognosy, Chelsea College of Science and Technology, University of London)

HEARTIEST congratulations to T. E. ("Tommy") Wallis on reaching the age of ninety. As the doyen of world pharmacognosists, there is no greater authority on classical pharmacognosy—that branch of the science which deals with the identification and authentication of crude drugs by microscopical methods. I look forward to still more years of fruitful discussion and personal friendship.

From PROFESSOR G. E. TREASE
(head of the department of pharmacy, Nottingham University)

I ADD my greetings and good wishes to the many which Dr. Wallis will receive on his ninetieth birthday. Although pharmacognosy is a particularly healthy occupation, few of its devotees can expect to equal the record of Dr. Wallis; still fewer reach his age with their faculties and interests unimpaired. It is now some thirty-five years since I joined the examining board of the Pharmaceutical Society and it was Dr. Wallis who kindly instructed the new boy in the art of examining. Since that time I have been grateful for his help and wise advice on many occasions.

EXPANSION PROJECTS

THE foundation stone for a new factory for Radiol Chemicals, Ltd., is to be laid at Witham, Essex, on December 6. The factory, which has been designed to incorporate the latest production techniques, will provide facilities for considerable expansion to the company's activities.

THE official opening of a hydrogen peroxide producing plant built for the Nippon Peroxide Co., Ltd., took place on November 9, at Koriyama, Japan. It came on stream at the end of October and uses the 'AO' process licensed by Laporte Industries, Ltd., who own 25 per cent. of the shares in Nippon Peroxide.

WORK starts shortly at a new factory and office building for New Croydon Rubber Co., Ltd., at Walworth Industrial Estate, Andover, Hants. The offices, warehouse and dispatch department are being moved to Andover during 1967 and the factory in October. Thereafter the existing premises in Streatham, London, S.W.16, will be closed.

DR. WALLIS A NONAGENARIAN

A symposium of birthday greetings

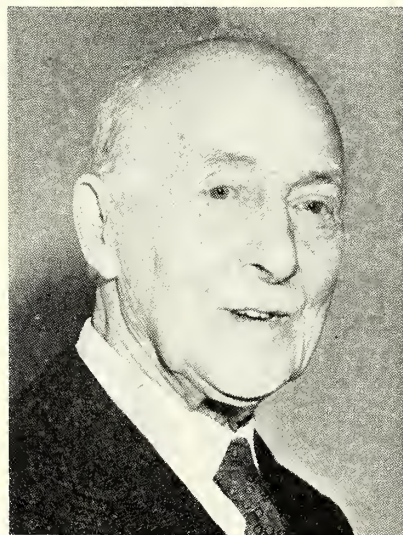
DR. T. E. WALLIS, still active and prominent in pharmaceutical affairs despite his long retirement as reader in pharmacognosy at the School of Pharmacy, University of London, celebrated his ninetieth birthday on December 1. It seems quite phenomenal that Dr. Wallis should continue to be seen vigorously questioning speakers at the science sessions of British Pharmaceutical Conference meetings or at evening meetings of the Pharmaceutical Society in London, and that his "History of the School of Pharmacy, University of London"—his fourth published volume—should have been issued as recently as 1964. By way of birthday honours to Dr. Wallis the C. & D. invited former colleagues and leading pharmacognosists to send greetings for publication.

From PROFESSOR H. BERRY
(Dean of the School of Pharmacy, University of London, 1937-56)

I WOULD like to join his many friends, old colleagues and students who will want to congratulate Dr. T. E. Wallis most sincerely in matriculating as a nonagenarian to the delight of us all. We do assure him of this and with it go our best wishes for a further happy progress to the century. I, particularly, look back with great pleasure to my long association with him at the Square where he reigned supreme in materia medica.

From PROFESSOR J. W. FAIRBAIRN
(head of the pharmacognosy department, School of Pharmacy, University of London)

GREETINGS to our perennial pharmacognosist whose continued vigour effectively rebukes any feelings that I am getting old, because of occasional lapses in my own internal information



retrieval system. I recall that thirty years ago, when I first worked with Dr. Wallis, he was then considerably older than I am now! And during the next decade, when most men would be preoccupied with retirement problems, he greatly developed my critical and scientific faculties by frequent and active mental sword play. Lang may your microscope knobs whirl, Dr. Wallis!

From DR. W. MITCHELL
(technical manager, flavours division, Bush Boake Allen, Ltd.)

WITH great pleasure I add my congratulations and best wishes to the many that Dr. T. E. Wallis will receive on his ninetieth birthday. Talking to him at Manchester in September, I re-

TRADE NOTES

Shaver Centre for Birmingham.—Schick Incorporated (U.K.), Ltd., have opened at 14 Moor Street, Ringway, Birmingham, 4, their second shaver centre.

Twenty-four per Case.—Gerber division of Brown & Polson Ltd., notify that their strained and "junior" food meat dinners (lamb, beef and veal) are now packed twenty-four to a case.

New Pack Sizes.—Southon Laboratories, Ltd., Howbury House, Thames Road, Crayford, Kent, have added to their range of U.F.I. aerosols packs of 10 gm. and 20 gm.

Concession Changes Hands.—Anestan, Ltd., Telford Road, Houndmills Estate, Basingstoke, Hants, have acquired Little Weiss, Ltd., the sole concessionaires for the perfumery products of Parfums Rigaud, Paris.

Appointed U.K. Distributors.—E. M. Douek & Co., Ltd., 18 Baker Street, Portman Square, London, W.1, have been appointed sole distributors for the United Kingdom of the perfumes of Jean Paton, Paris.

A Pack of 250.—Pharmaceutical Specialities (May & Baker), Ltd., Dagenham, Essex, have made available a pack of 250 Flagyl tablets (200-mgm.) in addition to the prescriber's pack of twenty-one tablets already listed.

How Much Water?—Each sachet of Epsikapron effervescent powder (Kabi Pharmaceuticals, Ltd., Bilton House, Uxbridge Road, London, W.5), dissolves in $\frac{1}{2}$ -l glass of cold water. [Corrected note.]

Under Sweeter Names.—W. W. Hafenden, Ltd., Sandwich, Kent, point out that the illustrations of three of their 1967 swim caps in the C. & D., November 19, were of the Sea Lace, Feather and Anna caps and not as stated.

Pharmaceutical Packaging.—Now installed at Artex Avenue, Rustington, Sussex, Thomas Marns, Ltd., undertake pharmaceutical manufacture and packaging, including tablet production, for both home and export markets.

Changes of Size.—London Rubber Industries, Ltd., Hall Lane, London, E.4, state that from January 1, 1967, the size range of Durex diaphragms (coil spring), No. M48, is being adjusted. They become available in sizes 45 to 90 m.m. in 5 mm. gradations. Prices are unchanged.

Now Tax-free.—MERRELL-NATIONAL (LABORATORIES), LTD., 20 Savile Row, London, W.1, have been granted purchase tax exemption for their Clomid (clomiphene citrate 50 mgm.) tablets.—ROCHE PRODUCTS, LTD., Welwyn Garden City, Herts, announce that Alloferin ampoules are now exempt from purchase tax.

Telephone Answering Service.—Products of Beecham Ethical Distributors, Great West Road, Brentford, Middlesex, may now be ordered by telephone between 5.15 p.m. and 9 a.m., and at week-ends and Bank holidays. A new STD number, 01-560 2876, has been installed for the purpose (callers from London exchanges should omit the 01).

Vaccine Discontinued.—Glaxo Laboratories, Ltd., Greenford, Middlesex, announce that production difficulties have made it necessary to abandon Quadrilin (four-in-one vaccine for immunisation against diphtheria, tetanus, whooping cough and poliomyelitis). The company is writing to medical practitioners and local health authorities suggesting alternative vaccination procedures.

No Need for Poison Label.—Gerhardt-Penick, Ltd., Thornton Laboratories, Purley Way, Croydon, Surrey, point out that, when they introduced Rinoxin on to the market, they submitted it to the Poisons Board and as a result labelled each tin "Poison." Rinoxin has now been specifically exempted from all poison regulations, and is now permitted as an open sale. In consequence it no longer needs to be labelled "poison."

Two Points to Note.—Astra-Hewlett, Ltd., King George's Avenue, Watford, Herts, stress that there are two varieties, "plain" and "H" of their Xyloproct suppositories. Pharmacists should ensure that the prescriber has made known on his prescription which of the two varieties is intended. The company's Thean tablets, they point out, are of the theophylline derivative proxiphylline and not of the alkaloid itself.

Against Spots and Alopecia.—An ointment for treating hyperpigmented skin spots and a pomade and tablets against alopecia are two specialities of Nationwide Pharmaceuticals, Ltd., distributed by McClure Young & Co., Ltd., 8 Standard Road, London, NW.10. The ointment, Leucodinin, contains 10 per cent. of methyl 4 hydroxyphenol in 90 per cent. of a water soluble excipient and is intended for the treatment of generalised lentigo, severe freckling, etc. The pack is a 1-oz. pot. Active constituents of the preparations against alopecia are ammoidin, ammidin and calcium pantothenate in the Alopecinin tablets and ammoidin, ammidin and sodium pantothenate in the pomade. The tablets are in tube of thirty, the pomade in a 1-oz. pot.

HANDY WITH THE FEET TOO: The ladies' football team from the photographic works of A. C. Vallance, Ltd., Mansfield, Notts. Standing are Misses Yvonne Nixon (secretary), and Brenda Wass (enprinter), Mrs. Sandra Hudson (enprinter), Misses Ingrid Vaughn, Dorothy Sharman and Carol Dicks (enprinters). Seated are Misses Lynn Davis (paper processor), Diana Dean (artist), Pauline Vaughn (enlarger), Thelma Plant (enprinter), and Mary Hett (enlarger). On November 13 the team played a charity match for the orphan children of Mansfield against the Nottingham Palais men's football club and the ladies won 5 goals to 4.



Competitions

"Mystery Snaps."—Philips Electrical, Ltd., Century House, Shaftesbury Avenue, London, W.C.2, are offering a first prize of £500 cash or photographic equipment to that value in Photoflux "Mystery Snap" contest commencing December 1 and ending February 28, 1967. Competitors have to identify six commonplace objects photographed from unusual angles, complete a simple sentence on the entry form and show proof of purchase. There are also ten second prizes of £20 cameras and sixty third prizes of £10 cameras.

"Princess for a Week-end."—L'Oreal Golden, Ltd., Berkeley Square House, Berkeley Square, London, W.1, are offering to the winner of a Color-Glo "Princess for a Week-end" competition now being run in Lancashire and Scotland a flight to London for winner and friend where they will stay at a major hotel, sightseeing by chartered helicopter and return to the airport by Silver Cloud Rolls-Royce. Contestants are required to place four sales points in order of preference and to complete a sentence about Color-Glo. Closing date is December 31. Visits to a beauty salon, restaurant and show are also arranged for the "princess" who will have £25 spending money. To the twenty-five runners-up transistor radios will be awarded and the retailer selling the product to the winning consumer will receive a trip to London and a night out on the town.

Bonus Offers

BURROUGHS WELLCOME & Co., 183 Euston Road, London, N.W.1, Emprazil wallet pack of twelve tablets. Thirteen invoiced as twelve on minimum 3 doz. order.

MANUFACTURERS' ACTIVITIES

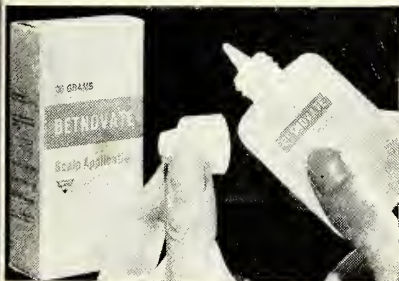
"Grooming" for Women Pursers on Ships.—Twelve young women pursers of the P & O line spent a day with Revlon International Corporation recently learning about make-up and grooming with special reference to the problems of make-up in different climates.

NEW PRODUCTS AND PACKS

PHARMACEUTICAL SPECIALITIES

For Treating Psoriasis.—Dermal Laboratories, Ltd., 247 Gray's Inn Road, London, W.C.1, have launched a new product Exolan cream for the treatment of psoriasis—a companion product to Exolan paste. The cream is intended primarily for use in psoriasis of the scalp and other hairy regions; and for the ambulant patient who prefers to use a vanishing cream to a paste. For such ambulant patients the ideal treatment would be to use the paste at night, wash it off in the morning in a bath, and then apply the cream for the day.

For Scalp Dermatoses.—Glaxo Laboratories, Ltd., Greenford, Middlesex, have developed a topical steroid product for the treatment of scalp dermatoses. The preparation—Betnovate scalp application—is the latest addition to the company's Betnovate range of products. It is an alcoholic solution of Betnovate containing 0.1 per cent. of betamethasone as 17-valerate. Viscosity of the preparation has been adjusted so that it is not too fluid yet



spreads easily over the scalp without adhering to the hair. The application is understood to have a pleasant cooling effect and to leave no odour or visible residue on drying. Pack is a plastic squeeze container with a nozzle long enough to allow the liquid to be applied to affected areas of the scalp without disturbing the hair. In use, the nozzle is applied through the hair direct to the lesion on the scalp, and the container then gently pressed, causing a controlled quantity of the application to spread over the scalp and around the hair roots. Betnovate application is claimed effective against psoriasis, seborrhoea, and dermatitis, and clinical trials have shown a high success rate, while the product has been found acceptable to the patients. It is available only on prescription. The pack is a 30-mil plastic squeeze bottle. The product is affected by restrictions on posting and carriage of flammable goods, may not be posted (it must be forwarded by either road or rail carrier). Retail pharmacists are accordingly being requested to obtain prescription requirements for small quantities from a local wholesaler.

VITAMIN PRODUCTS

In Redesigned Packs.—Haliborange tablets of Allen & Hanburys, Ltd., Bethnal Green, London, E.2, are now in three bright new packs of twenty-five, 100 and 200.

OVER-THE-COUNTER MEDICALS

Paediatric Elixir.—Dales Pharmaceuticals, Ltd., Power Road, London, W.4, are marketing a new Pardale paediatric elixir, based on their Pardale tablet. Packs are bottles of fifty and 250 mls.

Deep Cleansing Skin Medication.—Vick International Ltd., 10 New Burlington Street, London, W.1, are marketing a new product Clearasil AfterWash, a medicated deep cleansing liquid for oily skins and the blackheads and enlarged pores that may develop into pimples and acne. The product is used as an adjunct to the normal washing process. Though its appeal is mainly for teenage skin problems, the liquid will be found valuable, say the makers, for anyone with an oily skin, and for removing make-up. The pack is a cartoned bottle of 100 c.c.

COSMETICS AND TOILETRIES

Colour for "Shimmering Lips."—Elizabeth Arden, Ltd., 25 Old Bond Street, London, W.1, have launched a range of eight shades (pearly tones of raspberry, pink, peach, pearl and beige, blue, jade and lemon) of "Silverings" lip colours to be worn either by themselves or over a lipstick.

British Launch of Cosmetics Range.—The Barbara Gould cosmetic collection, already known in Europe and in the United States of America, is being launched in Great Britain by Barbara Gould, Ltd., 2 Old Bond Street, London, W.1, early in 1967. The range includes lipsticks, nail lacquer, eye make-up and treatment lines. The launch has been planned by Comte de la Brière (formerly managing director of Guerlain, Ltd.).

"Nothing" Colours—with Sparkle.—Yardley, of London, Ltd., 33 Old Bond Street, London, W.1, offer a new look for parties. The soft, clear "nothing" colours, they say, can be sparkled up to give a look that has excitement and glow. That is achieved with a new range of beige make-up preparations, in which the new shades pale and warm beige having been specially developed in the company's laboratory to give "an extremely clear, matt, natural-looking base." Each is obtainable in Yardley Feather and Moisture Tint foundations. The pale is recommended for the fair complexion, and the warm for the medium skin tones. To wear with the beige colours is a new Yardley moisture cream lipstick "Just Beige."

SUNDRIES

Pack Redesigned.—Dylon nylon white *ensemble* (counter display boxes for drums and sachets and hanging showcard) have been redesigned for greater selling impact. Liberal use of orange in the colour scheme is combined with bands of white with blue-green lettering and to which the blue-green showcard makes an effective foil. Manufacturers are, Maybourn Products, Ltd., Dylon Works, London, S.E.26.

A Shaving Set for the Bathroom Wall.—Ever-Ready Personna, Co., 26



Bedford Row, London, W.C.1, have produced the wall-clip shaving set illustrated. It is complete with razor, brush and "dispenser" with five long-lasting Personna super-stainless blades. It is issued in "window"-fronted carton.

FOODS

Plain Chocolate Meal for Slimmers.—Unicliffe, Ltd., Sandwich, Kent, are launching a Limmits plain chocolate bar in their Limmits range of slimming



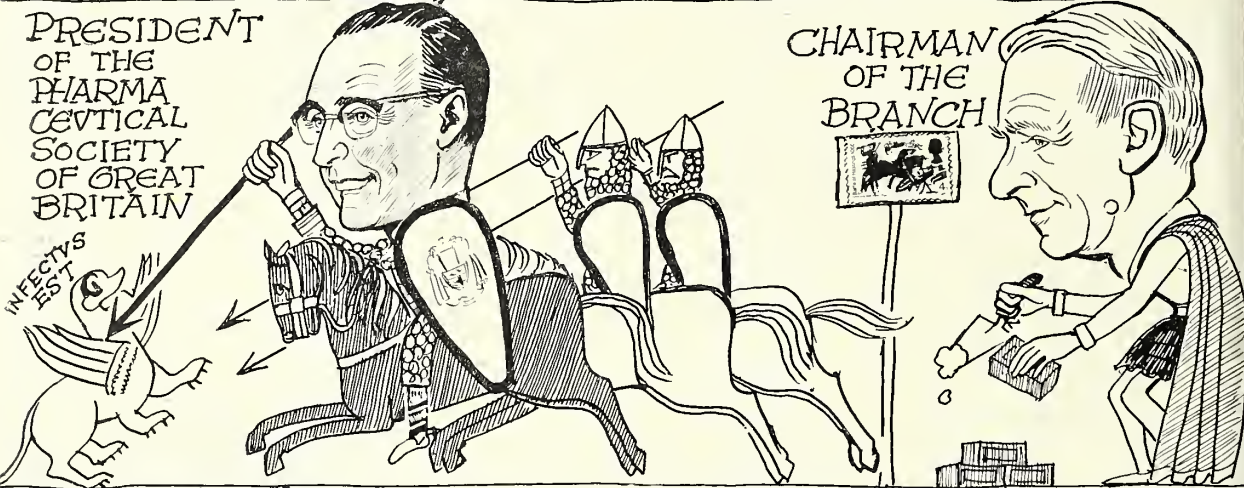
aids. Based upon the same nutritional formula as Limmits biscuits, each bar of Limmits plain chocolate is claimed to be a complete satisfying and nourishing meal. Each 2½-oz. bar is packed in a display outer of 2 doz.

PHOTOGRAPHIC NOTES

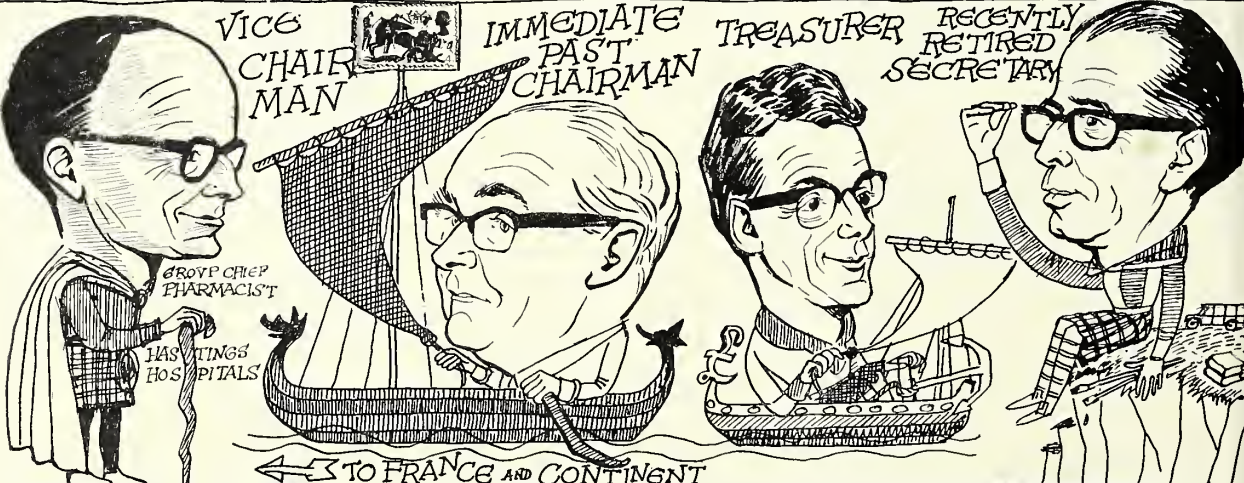
Invisible Mount.—A new, invisible adhesive mount, Twintaks, claimed ideal for mounting photographs is marketed by Brunton & Williams, Ltd., 148 Peckham Rye, London, S.E.22. Twintaks are self-adhesive labels constructed from thin latex with adhesive on both sides and give instant adhesion "without mess or bother." In packs of 100 or 1,000 (commercial).

Withdrawn.—Supply of Ektachrome II standard 8-mm. movie film has been discontinued by Kodak Ltd., Kodak House, Kingsway, London, W.C.2. Since its introduction in November 1965, state the company, demand has remained disappointingly low, making an efficient processing service by the manufacturers impracticable, while the hope that independent processors would offer a service was not fulfilled. Customers may at present continue to send unprocessed film to Hemel Hempstead though in time the film will have to be sent on to a processing station abroad.

CD ARTIST CONSIDERS IT FITTING, IN THIS 900TH ANNIVERSARY YEAR OF THE BATTLE, TO GIVE THE BAYE-VX TREATMENT TO THE HASTINGS AND DISTRICT BRANCH MEMBERS AND GUESTS AT THEIR DINNER AND DANCE XVI/XI/MCMLXVI



DRUG ADDICTION J.C. BLOOMFIELD AND COUNCIL SUPPORTERS TONY EMELIUS



VICE CHAIRMAN IMMEDIATE PAST CHAIRMAN TREASURER RECENTLY RETIRED SECRETARY DB. MATHIESON R.H. KEMP FRANK PELHAM GEORGE DUNCAN



BRANCH SECRETARY HEAD OF BRIGHTON SCHOOL OF PHARMACY LOCAL N.P.V. SECRETARY RA. EMELEVS MARGARET DR. E.A. RAWLINS E.R. GOWANS

BRANCH EVENTS

HASTINGS

Annual Dinner and Dance

HASTINGS Branch of the Pharmaceutical Society held its annual dinner and dance at the Queens hotel, Hastings, on November 16. Guests of honour what is reported to have been a very successful" function included Mr. C. Bloomfield (president of the Society) and Mrs. Bloomfield, and the deputy mayor of Hastings (Councillor S. Bentwood) and Mrs. Bentwood. Mr. ERNEST A. RAWLINS (principal, Brighton School of Pharmacy) headed the toast list, proposing "The Pharmaceutical Society of Great Britain." Dr. Rawlins said that twenty years' experience of pharmaceutical education had convinced him that today the technologies were not drawing a sufficient number of good students, and that the expansion in education at university level had tended to produce a "brain rag" in favour of the arts. Mentioning the new degrees in pharmacy he stressed that the syllabuses were realistic and fully compatible with both professional requirements, and the attainment of adequate academic standards. The final experience needed to make a fully trained pharmacist must be obtained within the profession itself, however, and the schools of pharmacy must work with the profession to ensure that the future pharmacists were not only trained but educated. Mr. BLOOMFIELD, replying, said he was the pharmacists' representative on a committee dealing with drug addiction, and misuse of medicines and drugs. The pharmacist was in a better position even than the doctor to see that the public often failed to handle their medicines with the necessary respect. For the toast to the borough of Hastings, Mr. G. A. A. EMELEUS (branch chairman) reminisced over his fifty years' knowledge of the town, remembering back to the first solid-wheeled bus to run between Battle and Hastings. He said that he and the deputy

mayor had remained friends from schooldays. COUNCILLOR BENTWOOD, responding, apologised for the absence of the mayor and mayoress, and affirmed the friendship between the chairman's and his own families. The borough had enjoyed a wonderful year, and he thanked the pharmacists for their part in it. The toast to the ladies brought to his feet Mr. J. C. N. WILFORD, and MRS. R. H. KEMP (wife of the immediate past-chairman) responded. The evening continued with dancing. The band had a pharmaceutical flavour, as Mr. T. G. Jones, leader, is the Eastbourne Branch chairman.

SOUTH-WEST LONDON

Raffle for Aberfan

THE annual dinner and dance of the South-west London Chemists' Association was held in Wandsworth town hall on November 2. The mayor of Wandsworth (Councillor A. A. Lough-ton) and mayoress, and Mr. E. A. Brocklehurst (chairman, National Pharmaceutical Union) and Mrs. Brocklehurst were present, together with the presidents of neighbouring associations and Mr. L. P. Willis (clerk to the Inner London Executive Council) and Mrs. Willis. MISS B. M. KELL proposed "The National Pharmaceutical Union." Mr. BROCKLEHURST replying, and the mayor proposed "The South-western," to which Mr. J. A. C. WALLER (president) replied. During the dinner a camera given by Kodak, Ltd., and raffled for the Aberfan Fund, realised £21, and a cheque for that amount was handed to the mayor for sending to the mayor of Merthyr.

SHEFFIELD

Adverse Reactions

A JOINT meeting of the Sheffield Branches of the Pharmaceutical Society and Guild of Public Pharmacists was held at the Middlewood Hospital,

Sheffield, on November 18. In an address on "Adverse reactions to Drugs" PROFESSOR R. KILPATRICK (professor of pharmacology, University of Sheffield) explained that reactions to drugs fell into three categories—reaction implicit in drugs owing to their pharmacological action; idiosyncratic or allergic hypersensitivity; and miscellaneous, (effects on nutrition, teratogenic effect, etc.). Professor Kilpatrick also classified reactions as functional, biochemical and structural. He showed how figures on the incidence of drug reactions proved reaction to a particular substance, illustrating his talk with a film and concluding with a plea that usage of a new drug should be made subject to a probationary period.

CHESTERFIELD

Gavel and Block

WHEN members of Chesterfield Branch of the Pharmaceutical Society met on November 17 MR. F. BEAUMONT, Sheffield, presented the Branch with a chairman's gavel and block. He did so, he said, as a visible appreciation of the courtesy and help he had received from members during his thirty-six years as a representative in the area for Evans Medical, Ltd. His only regret was that, in a reorganisation that followed the formation of Vestric, Ltd., he had been transferred to an area further north. Branch chairman MR. J. R. WILCOCKSON, in receiving the gift, told how both the older and new generations of members had appreciated Mr. Beaumont's help and advice. He invited Mr. Beaumont to be the first to use the gavel to introduce the next business. MR. P. JAMES gave an account of the recent meeting of branch secretaries, and Mr. D. J. Brocklehurst summarised members' answers to a questionnaire dealing with ideas on future Branch activities, members' hobbies, position in firm, and membership of other societies.



COMMITTEE AND GUESTS: Members of the organising committee of the Swansea and West Wales Branch of the Pharmaceutical Society photographed with guests of honour at their annual ball held recently. Among the guests were the mayor of Swansea (Alderman T. R. Davies), and Mrs. Davies, Mr. Allen Aldington (vice-president of the Society) and Mrs. Aldington, Mr. L. A. Paster (branch chairman) and Mrs. Paster, Dr. and Mrs. W. H. Kerr, and Mr. and Mrs. W. H. Shepherd.

Correspondence

Letters when received must bear the name and address of the sender, not necessarily for publication. The Editor does not hold himself responsible for the views expressed.

Outcome of an Appeal

SIR,—Further to my letter of appeal for the Aberfan Disaster Fund, as High Constable of Miskin Higher, in your issue of October 29, readers may care to know that last week I presented to the mayor of Merthyr a cheque for £157 10s. A cheque for \$3 has since arrived from California and is being forwarded to the mayor, who asks me, through the pharmaceutical Press, to thank all who so readily subscribed to the Appeal from all parts of the country.

H. NOËL THOMAS,
Aberdare, Glam.

Ski-ing at Hogmanay

SIR,—May I make use of your columns to inform readers of the British Pharmaceutical Students' Association Hogmanay ski holiday, which is open to pharmacy students and pharmacists alike. This annual event is being held this year at Grantown-on-Spey, Morayshire, from Wednesday, December 28 until Tuesday, January 3. The Cairngorms offer excellent facilities for expert or beginner, and for those who wish ski hire and instruction are available through the Scottish Norwegian ski school. A coach is leaving London at 1600 hours on Tuesday, December 27, travelling via Birmingham, Manchester and Edinburgh. Cost of accommodation (at the Spey Valley hotel) and coach transport is £17 10s., which represents excellent value for a ski-ing holiday during the festive season. Further information may be had by writing to:

GORDON L. GEDDES,
Scottish Representative, B.P.S.A.,
Abbeymount,
Edinburgh, 8

Eye lotion of sodium bicarbonate

SIR,—I have read with interest the letter from your correspondent Mr. C. H. Patrick, in which he expresses the opinion that I am wasting my time in sterilising eye lotion of sodium bicarbonate, B.P.C., by heating in an autoclave. The monograph on this eye lotion in the 1966 Supplement to the B.P.C., 1963, gives the following direction for preparation.

DISSOLVE, filter the solution, transfer to the final containers, and pass a stream of carbon dioxide through it for one minute before finally closing the containers and sterilising by heating in an autoclave: the containers should not be opened until at least two hours after the solution has cooled to room temperature. Alternatively, the solution may be sterilised by filtration, and transferred to the final containers, which are then closed.

I am aware that sodium bicarbonate in aqueous solution decomposes into sodium carbonate and carbon dioxide at 115°C. However, in a sealed container and in the presence of excess carbon dioxide, the reaction is reversible. The pH of the eye lotion I pre-

pared was 8.2 both before and after sterilising. Had there been any appreciable decomposition into carbonate I would have expected a rise in pH, and in fact the pH of a similar lotion autoclaved in an unsealed container and without having a stream of CO₂ passed through it was 9.6. I have sent one of the bottles of the eye lotion to the Department of Pharmaceutical Sciences of the Pharmaceutical Society, asking them if they will be kind enough to examine it to see if it complies with the B.P.C. standard. If they are willing to do this, I shall be pleased to communicate their result to you.

N. J. STOW,
Bury St. Edmunds, Suffolk

Business with Reasonable Freedom

SIR,—Xrayser has, in my opinion, written an article (*C. & D.*, November 26, 1966) in specious terms, particularly the third paragraph, in which he attacked Mr. W. T. Rees and the National Pharmaceutical Union for daring to comment upon the Pharmaceutical Society's proposals for restrictions upon advertising, including those relating to what appears on and inside a pharmacy. It is hardly likely, however, that your readers in general practice will have failed to form the same impression as I. The fact is, whether Xrayser likes it or not, that two-thirds of a pharmacist's income in general practice comes from the retail side of his business, and in the main it is that side which the N.P.U. exists to serve. That being the case it is, as Mr. Moss said at the N.P.U. conference on October 16, the duty of the N.P.U. to examine carefully all proposals emanating from Bloomsbury Square that have a direct bearing upon the retail side of general practice. That is necessary in order to ensure that any proposed restrictions designed to improve the professional "image" strike a correct balance between that aim and the need for maintaining economic viability. It has been argued that, since certain members of the Society's Council are in general practice, they are in a position to see that this point is taken care of, but the N.P.U. cannot abrogate its responsibility to its members on grounds such as that. Those Council members have been elected by the whole body of pharmacy, including not only those engaged in other branches of the profession but also those in the multiple and Co-operative organisations, whose approach might be quite different from the one which N.P.U. members would want adopted. It is quite possible, for example, that the multiples might welcome a ban on the use of the title "Chemist" as a description in an advertisement; the name of the largest has now become synonymous with "chemists" and they might see it as a restriction upon their private competitors without detriment to themselves. Should it ever be possible for general practice pharmacy to become

economically viable solely on the professional or dispensing side, such considerations may cease to have relevance but until that time comes, and just as long as we have to rely on the retail side of pharmacy to make it a worthwhile proposition, then we have to ensure that we are able to carry on the side of the business with reasonable freedom. Once again, as Mr. Moss said at the Conference, we must and do because of our professional background accept the need for certain restrictions, but it is the N.P.U., because of its business organisation and "know-how" that is in the best position to assess the impact of any proposed restrictions upon the retail side of our business. As a general rule the individual member has neither the time nor the necessary experience to be able to assess with any degree of accuracy the possible effect upon him of proposed restrictions, and any failure on the part of the N.P.U. to use its knowledge and experience to advise could be construed only as a grave dereliction of its duty. Far better, therefore, that restrictive proposals affecting general practice pharmacy should be talked over between the two bodies at the outset, and any misgivings resolved at that time than have a repetition of the situation which arose before the 1965 Branch Representatives' meeting when the N.P.U. had to indicate to its members reasons why the proposed ban upon the use of the title "Chemist" in a descriptive context in an advertisement was not in the best interests of its members. What, I wonder, would be the reaction of hospital pharmacists if the body representing their economic interests were not consulted in advance of the imposition of new professional restrictions that could affect their livelihood? Xrayser's contribution of last week well illuminates the dangers of a theoretical, doctrinaire approach to what is essentially a practical problem. Such articles serve only to stimulate dissension at a time when unity of purpose is more than ever desirable.

J. WRIGHT, Secretary,
NATIONAL PHARMACEUTICAL UNION
London, N.14

Unkindest Cut

SIR,—We have it drummed into our heads that "nationalisation" means stagnation and that only "private enterprise" is keen and alert and adaptable enough for modern conditions. Sometimes the alertness seems lacking also in the private sector. One of the biggest private firms is making a "free" offer requiring customers to send away labels with a sixpenny postal order to get a sample of talcum powder. But there is no such thing as a sixpenny postal order today.

KOHIMA

Poser Solution

THE prescription reproduced last week should be read "Tab. Ferrodic. Tabs 150, 11 t.d.s."



C&D CHEMIST AND DRUGGIST

For Retailer, Wholesaler and Manufacturer

ESTABLISHED 1859

Published weekly at

28 Essex Street, Strand, London, W.C.2

TELEPHONE: CENTRAL 6565

Too Much for One Prescriber

A CASE considered by an Executive Council and reported on p. 538 is of general importance in underlining the responsibilities of the pharmacist in the matter of larger-than-usual doses. It is unfortunate that disputes should arise between prescribers and pharmacists, and every safeguard should be applied by both sides to avoid them. From the doctor's side he should be aware that, if he orders a dose that is abnormal, he is placing the pharmacist in a situation of—at the very least—doubt, and should resolve the doubt beforehand by making it clear on the prescription, whether by initialling the dose or by underlining it, that the abnormality is intentional. From the pharmacist's side he should make the most strenuous efforts, where that clue is not given on the prescription, to speak to the doctor and get the confirmation verbally that the doctor has not given in writing.

In all circumstances, however, the patient's welfare is paramount, and if the medicine is urgent and the doctor cannot be contacted then the pharmacist must play safe. He must not pass on to the patient instructions which he believes involve an overdose. If medicine is handed over before the doctor can be contacted it should be with some such proviso as "Mrs. H., you may need to start taking this medicine right away, but I have to get in touch with the doctor about the instructions he wishes me to put on the label as to dosage. Until I have been able to do so I suggest you take . . . [the pharmacopoeial dose]. Then if the doctor wants you to have more than that I will get in touch with you again."

That approach will be to nobody's discredit or disadvantage yet will allow the treatment of the patient to proceed without delay or interruption.

Too Useful to Shelve and Forget

THE successful pharmacist is usually the one who can most effectively employ both the human and all the available impersonal aids that are at his disposal. In the larger retail and hospital pharmacy the quality of the assistants is often a most important contributory factor in the success of the organisation. Yet paradoxically it is usually in the larger organisation that the best use is made of published information. In the smaller enterprise, where there are few employees or none to add their contribution, greater reliance, if similar success is to be achieved, has to be placed on all the extraneous aids that, coupled with an efficient system of working, can be pressed into service.

C. & D. subscribers in both groups, together with those others who are engaged in the pharmaceutical industry, require adequate reference sources readily to hand. As one such book of reference the *C. & D. Diary and Year Book*, 1967, has been designed and compiled for constant reference throughout the year. Providing as it so often does just the information that is needed in a particular situation, it merits an immediate study of contents on its arrival, so that when the situation arises the whereabouts of the answer comes immediately to mind. How often in the course of the year is the Information Department of the *C. & D.* asked for information which the inquirer, had he but realised it, could have located in the *Year Book's* pages.

One of the most important features of the 1967 edition, copies of which have been posted to most subscribers this week, throws light on a problem that has come into considerable prominence in recent months. In a medical treatment in which several potent drugs are being prescribed simultaneously but for different medical purposes, what risks are there that one medicament will, within the patient's body, react with another to cause undesirable effects that might have been avoided by the choice of an alternative drug? The subject as a specific study is only yet in its infancy and not too much is known about it at present but, so far as untoward effects have been recognised and reported, they are presented in a new four-page "Table of Drug Interactions."

Nowadays the advisory statements by the Council of the Pharmaceutical Society seem to appear with greater frequency than ever, and we have thought it a useful service, by way of refresher, to bring together on p. 242 of the *Year Book* all those that were issued in the twelve months before the book went to press.

In those areas for which salary scales have to be negotiated — pharmacists and assistants in general practice and pharmacists in hospitals — 1966 has seen the introduction of new rates, and they are given.

Recent modifications are brought in to make fully up-to-date the reference material on pharmacy within the National Health Service; on purchase tax; poisons and Dangerous Drugs; officers of public, professional and trade bodies; postal charges, etc. The directory of hospital group and chief pharmacists remains the most comprehensive directory of its kind (though information to fill a few gaps would be most welcome from any subscriber able to supply it). And there are numerous "minor supplements" to the main courses.

The Buyers Guide, Trade Directory and manufacturers' own announcements provide invaluable guidance on sources of supply, and all told the *Year Book* has always something to offer and can hardly be too frequently on call.

A PHARMACIST'S ANTHOLOGY GIN (PLUS) WITHOUT RESULT

From "Curing a Cold," by Mark Twain

I GOT to coughing incessantly, and my voice fell below zero: I conversed in a thundering bass, two octaves below my natural tone. I could only compass my regular nightly repose by coughing myself down to a state of utter exhaustion, and then the moment I began to talk in my sleep my discordant voice woke me up again. My case grew more and more serious every day. Plain gin was recommended; I took it. Then gin and molasses; I took that also. Then gin and onions; I added the onions, and took all three. I detected no particular result, however, except that I had acquired a breath like a buzzard's.

PHARMACY IN WEST AFRICA

A pleasant life but with drawbacks and small future

by DIAPHORETICA

THE recent article by Sat Sapienti on "Pharmaceuticals in West Africa" (*C. & D.*, June 11, p. 590) gave a clear picture of the outlook for pharmaceuticals in this part of the world. May I supplement it with information on pharmacy and the conditions afforded pharmacists in West Africa, with special emphasis on Nigeria—the most important West African market.

It has often been said that in West Africa the g.p. doctors practise surgery while the g.p. pharmacists practise medicine, and that is, to some extent, true. Doctors commonly have their own hospitals, in which it is not unusual for one doctor to look after sixty beds. In addition the doctor may perform ten or more operations in a day. Except in the teaching hospitals (two in Nigeria) there are few anaesthetists, and normally the anaesthetic is given by the theatre sister or some other person. These hospitals do their own dispensing, but it is rare that the dispenser is a pharmacist. The amount of such dispensing in hospitals explains why so few prescriptions are received by pharmacists in general practice.

Consulting Rooms for Pharmacists

Pharmacists and pharmacies are few, though naturally more numerous in the larger towns. Not many are up to the standards of those of the developed nations, though one British company in Nigeria has set quite a standard in its retail shops and dispensaries. Many of the indigenous pharmacists have consulting rooms, and commonly diagnose and treat illnesses, even when the treatment includes injection and/or antibiotics. Doctors decry that state of affairs, but as there are so few doctors it is accepted.

Main hospitals are either Government owned or are run by missions, or they may be joint hospitals where the Government and/or local authority supply funds for the hospitals, but they are run and managed by missions. Most of these hospitals employ pharmacists, the Government hospitals have indigenous pharmacists while the missions may have indigenous or expatriate pharmacists, the latter being missionaries.

Poisons legislation is similar to that in the United Kingdom but bulk purchase of drugs, otherwise than for hospitals, is done by traders who are seldom pharmacists. It is common, however, for a pharmacist (for a commission fee) to lend his signature to a trader's order for drugs, so that the trader may then purchase his requirements, including poisons and antibiotics. Legally the wholesaler may then supply the trader, who becomes, in the eyes of the law, a messenger of the pharmacist. Morally, of course, it is wrong, as the trader merely sells the items into the markets, and they eventually get into the hands of unqualified people and "quacks." Great efforts have been made to end that state of affairs. Police raids on markets and on road transport are common. Proper inspection is one answer, but law enforcement is difficult in the region, and the solution lies in preventing the supplies of medicines to dealers other than pharmacists.

Under the existing system sales through these traders can be very large, sales of vialled antibiotics through wholesalers can be in hundreds of thousands of vials per month, in addition to the antimalarials, anthelmintics and other items. The situation is such that in a place like Onitsha market in Nigeria, it is common to see displays of dexamphetamine tablets on the market stalls and it is even alleged that a person may obtain an injection of pethidine from a trader, who will do it if necessary through the trouser leg, probably with a dirty syringe and needle. Oily penicillins are still firm

favourites as the pain of injection is alleged to mean "powerful medicine."

It is difficult to imagine that the new pharmacists now being turned out from the schools of pharmacy will agree to the present freedom of distribution of drugs. It is to be hoped that measures will be taken to restrict all pharmaceuticals to the right hands as, with the dire shortage of doctors (about 1 to 55,000 patients) the pharmacists performing their proper function can do an enormous amount to safeguard the health of the people.

In countries where the annual pay of a labourer is about £100 newly qualified indigenous pharmacists usually commence at a salary of about £1,200 per year (salaries appear fairly even in all sectors). Qualified representatives are provided with cars and out-of-pocket expenses, but indigenous pharmacists rarely have accommodation provided. An indigenous pharmacist representative probably costs the manufacturer about £3,000 per year in total.

The cost of living for expatriates is about twice as high as in the United Kingdom. Salaries offered to British pharmacists, therefore, have to be substantially higher than in the United Kingdom. While vacancies are still advertised at salaries of £2,000, that figure, especially for a married man with children, is quite inadequate, and a starting salary of £2,500 for an inexperienced man would be more realistic. Educational facilities for older expatriate children are non-existent, and the children must be sent home to the United Kingdom for their schooling. Most companies pay an education allowance (usually £400 or more per annum) but the allowance is taxable.

Comparative Costs

Furnished accommodation is usually provided, free for expatriate pharmacists. Most companies provide everything down to linen and curtains, and will also contribute to the cost of electricity and servants. Electricity is a heavy expense. In most places it costs threepence per unit and in accommodation with air-conditioners the monthly bills are often up to £20. The cost of living for expatriates is also made high by the high rates of import duties levied on foods and other items essential to their way of life. Some foods can be four times as dear as in the U.K. Cosmetics bear 100 per cent duty. Drink costs about the same and petrol is cheaper, both cars and car servicing are considerably more costly, the latter being aggravated by poor roads and few trained mechanics. Most progressive companies do not expect their employees to provide their own cars in view of this, but it is surprising that the more recently registered companies are apparently more enlightened in staff welfare matters than the older ones which, by their greater experience should know better.

"Canned" entertainment in West Africa is limited, radio reception is poor and the T.V. programmes where they exist are usually very old. Electrical breakdowns are frequent, medical facilities are limited, and in the towns other than the Capitals most of the social life centres round the "club." In spite of these apparent drawbacks the work can be interesting and the country and people fascinating.

Most pharmacists in charge of branches of wholesalers or of manufacturers show a high responsibility in their job, and it is mainly due to them that business is as brisk as it is in the competitive market. Accounting systems, formulated to ensure maximum security of stock and cash, tend to be tedious when compared with practice in an equivalent business in the United Kingdom.

Unfortunately in West Africa the men tend to work very

hard, while the women, on the other hand, have little to do, since it is usual and indeed expected that they should employ servants in the home. Many wives would like to work but either cannot find work or cannot obtain a "work permit." So after the first novelty of a strange country has worn off wives get bored. Young children have a good time, but, as mentioned, older children must be sent home to school. Those factors can cause domestic upheavals.

But the policy of Africanisation in the West African Territories, especially Nigeria, removes any "career" prospects for expatriate pharmacists unless they work for international companies. So most pharmacists serving in those regions endeavour to save money for a house or business back home, and tend to make their stay of short duration. Provided that situation is understood, life in West Africa can be very enjoyable and the excellent experience obtained can be something to remember for the rest of one's life.

NEW BOOKS

Wine Making for All

JAMES MACGREGOR, *Faber & Faber*, 24 Russell Square, London, W.C.1 8 x 5½ in. Pp. 144. 18s.

THE book, although intended for those who have had some experience of wine making, is comprehensive and sets out all that one needs to know on the subject. The early chapters deal with equipment and materials. Methods for making a wide range of wines are described and problems that arise after the preliminary stages have been passed are discussed. Chapters are devoted to maturing and blending, and a calendar gives suggested year-round planning so as to make full use of containers.

World Directory of Schools of Pharmacy

World Health Organisation, Geneva. (Available in Great Britain through H.M. Stationery Office.) 9½ x 6¼ in. Pp. 301. 35s.

THE work is the fifth in a series of world directories published by the World Health Organisation. It describes the salient features of education in pharmacy in eighty-one countries as revealed by answers to a questionnaire distributed to schools of pharmacy by the governments concerned. A separate chapter on each country describes the organisation and administration of its schools of pharmacy, the conditions of admission, curriculum, examinations and qualifications required for a licence to practise. Introductory data include population and numbers of pharmacists and schools of pharmacy. Eleven annexes set out in tabular form information on pharmacists, schools of pharmacy, and conditions governing the practice of pharmacy in different geographical areas and in the world. Like so many statistics, the tables pose almost more questions than they answer. For example, how can a single pharmacist cope with a population of 9,700,000 in Nepal when one of his colleagues is required for every 730 residents in Monaco? But the real value of the book is the mine of information it provides for all interested in the training of the next generation of pharmacists.

Hospital Infection — Causes and Prevention

R. E. O. WILLIAMS, R. BLOWERS, L. P. GARROD and R. A. SHORTER, *Lloyd-Luke (Medical Books), Ltd.*, 49 Newman Street, London, W.1. Second edition, 8¼ x 5¼ in. Pp. xii and 386. 45s.

THE present volume brings up to date much of the information in the first edition published six years ago. It sets out logically to describe the epidemiology of infections and then makes many practical recommendations directed to the prevention or combatting of hospital-acquired infections. As in the earlier edition the authors introduce the subject by dealing with streptococcal infections, and indicate how by the ability to type the pathogenic organisms of this group is made possible by tracing courses of infection and cross infection leading to a more positive contribution to the measures needed to be adopted to limit the spread of hospital infection. That leads on to staphylococcal infections and those resulting from Gram-negative bacilli. Subsequent chapters deal with gastrointestinal, urinary, tetanus, gas-gangrene and a wide variety of ward

infections including tuberculosis, measles, hepatitis and fungal infection. The whole of the contents are weighted with references, many of which present conflicting observations and evidence. It is therefore refreshing to find in places a clarification of the evidence presented. An example is the conclusions drawn on infections in maternity units (p.67). On the other hand the writers rightly present the difficulties, as when analysing the causative factors of infection in the conclusions at the end of Chapter XI. The removal of the section on non-surgical sepsis to Chapter X, dealing with various infections occurring in all types of wards, is an improvement. In the earlier chapter on sepsis of surgical wounds, reports of later work in the field of infection from bedding, isolation and nasal chemoprophylaxis correct the impression given in the first edition that attention to those factors gives greater protection than that which has subsequently been found from further practical experience and investigation. A large amount of revision has taken place in the second section. The necessity for administrative control is repeated, but a considerable amount of new information is now available on operating-suite design and practice as a result of architectural studies and the application of fundamental principles of asepsis to the unit as a whole. The impact of central sterile supply departments developments has resulted in considerable improvement to the practical recommendations in respect of procedures for the control of infection in wards. Sterilisation by heat is well described, but the chapters dealing with sterilisation and disinfection by chemicals leave many questions unanswered, as well as some uncertainty as to the strength of preparations to be used (particularly in regard to the use of hypochlorite). There is a need for real guidance on the use of antiseptics, as so many hospitals have as yet failed to formulate a real policy on the use of chemical agents, and tend to flounder in a sea of confusion by employing almost every conceivable chemical antiseptic when, as the authors point out in a short reference, the sound basis for the use of chemical agents is in using a few preparations at standardised concentrations. The book should be available in every hospital, as it must be regarded as one of the best guides to the subject yet available, and capable of providing real guidance to those engaged in grappling with the problems of infection in hospital.

NEW FILMS

Their First Year

EOTHEN FILMS, LTD., under the joint sponsorship of *Farley's Infant Food, Ltd.*, 8 Galleywood Road, Colnbrook, Bucks, and *Johnson & Johnson (Great Britain), Ltd.*, Slough, Bucks. 16-mm. Colour. Sound. Running time 35 min. Distributed by Farley's Infant Food, Ltd.

THE film forms a natural sequel to the film "To Janet — a Son" which is shown annually to many mothers-to-be in many parts of the world. "Their First Year" made essentially for showing to mothers and mothers-to-be illustrates the simple day-to-day hazards that most parents with young children encounter during that period — occasions when doctors, nurses, health visitors and others may be called upon to contribute in helping to ensure the babies' welfare.

Congenital Heart Defects in Young Children

FILMED AT THE HOSPITAL FOR SICK CHILDREN, Great Ormond Street, London, with the co-operation of Messrs. R. E. Bonham-Carter, F.R.C.P., G. R. Graham, M.D., E. Aberdeen, F.R.C.S. and D. J. Waterston, M.B.E., F.R.C.S. Boehringer-Ingelheim, Ltd., Isleworth, Middlesex. 16-mm. Colour. Sound. Running time 18½ minutes.

EACH year in the United Kingdom over 6,000 babies (around six per 1,000) are born with malformed hearts, and about 2,000 of them need treatment if they are not to die in their first year. The importance of early recognition of the signs of congenital heart defects can hardly, therefore, be over-emphasised. The film, subtitled "A Great Ormond Street Report," demonstrates, by means of live action and animation, the most common cardiac defects in young children and shows how they may be easily recognised by the general medical practitioner. It also points out the importance of reassuring the mother.

How Virus Vaccines are Controlled

PROBLEMS OF MAINTAINING THE SAFETY AND EFFECTIVENESS

THE 1966-67 session of scientific evening meetings of the Pharmaceutical Society of Great Britain opened on October 19 with an account of modern methods of controlling the safety and efficacy of virus vaccines. It was given by Dr. F. T. PERKINS (National Institute for Medical Research).

Production Factors

Dr. Perkins said that no vaccine could be controlled entirely by laboratory tests. Quality of premises, experience of staff and tests applied to the vaccine were all factors integral to a safe vaccine. The grant of a licence to sell a vaccine under the Therapeutic Substances Act obliged the licenceholder to allow representatives of the licensing authority to inspect his premises. Each immunological product had to be produced in a separate area of the building. Some products ought never to be made in the same building as one another, since accidental contamination might have serious consequences (examples were tetanus vaccine; living infectious vaccines given orally and vaccines given parenterally). The problem was often overcome by sequential production whereby, after a sufficient amount of one vaccine had been made the building was sterilised with formalin or ethylene oxide, washed down or redecorated, and used for the production of a second. Production of virus vaccines involved the use of complex biological systems demanding the constant attention of experts, and all persons signing any section of a protocol must be registered with the licensing authority.

For killed virus vaccine the only requirement affecting the seed strain was that it should be killed in a regular manner and be immunogenic. Killed poliomyelitis vaccine had taken several years to develop because all early attempts to kill the virus also destroyed its antigenicity. Once the critical concentration of formalin needed to kill the virus and retain antigenicity was found it was no longer considered necessary to use a particular strain. With an infection such as influenza a new problem arose from the constant emergence of new antigenic variants, calling for constant revisions of compositions of the vaccines.

The data required for approval of seed strains for vaccines prepared from living attenuated viruses were much more complex than for killed. Invariably the original wild virus was attenuated in cell cultures (for example poliomyelitis viruses in monkey kidney tissue grown at 35 deg. C. and measles virus in chick embryo fibroblast cultures). A change in pathogenicity in some laboratory animal tests (as when the attenuated poliomyelitis viruses no longer paralysed monkeys) indicated that the virus might now be subjected to a small pilot clinical trial in man. Then followed larger trials to prove safety and immunogenicity.

After approval of the particular

strain for vaccine production, control tests had to ensure that the virus had not changed during production of the vaccine. The attenuated strain must not revert to the wild, nor must it become further attenuated, lest it became also immunogenic. The seed pool, having been tested for extraneous agents or any undesirable property, the "seed virus system" was rigidly applied. The pool was kept frozen or dried in suitable aliquots, and each batch of vaccine must originate from the approved seed. For live attenuated vaccines the production batch must not be more than a limited number of passages from the seed strain, according to the genetic stability of the virus.

Some virus vaccines were still produced in living animals—smallpox vaccine in the skin of calves, buffalo or sheep; rabies vaccine in rabbit brains and yellow fever vaccine in fertile eggs—but the more recent were grown in cell cultures, and the safety of the substrate was as important as the safety of the virus itself. Many of the safety tests applied by the manufacturer were concerned with a search for extraneous agents in the cultures.

Some of the primary tissues used were prepared from whole chick embryos or the kidneys of monkeys, dogs, bovine animals and guinea pigs, the most widely used tissue being that from monkey kidneys. Even though tumour-forming viruses of monkey origin had been isolated, the absence of untoward reactions in man had fostered a feeling of security. By 1958 twenty-six simian viruses had been isolated from monkey kidney tissue. Today the number was forty-one. It had been shown that a vacuolating virus detected in 1960 could produce tumours in hamsters. The vaccine had not, when given to man parenterally or orally, been associated with any untoward effect, but observations might have to be continued for some time before freedom from risk of tumour formation in man could be established.

Monkey species differed in the extent to which they were infected with simian viruses, and to transport several monkey species in the same consignment might cause cross contamination. The problem had largely been overcome, not only by transporting monkeys of a single species together but by holding them in small numbers or even in separate cages. A further precaution was to quarantine the monkeys for at least six weeks before the kidneys were used for cell cultures. Nevertheless some kidneys were inherently contaminated and would remain so while animals continued to be caught in the wild state.

Contamination in Eggs

A similar situation had been solved. Yellow fever vaccine, though regarded as one of the safest, was produced in chicken embryos, which were not necessarily free from avian leucosis viruses, a cause of tumours in birds.

Millions of doses had been given to man without immediate untoward effect and surveys of armed-forces personnel who had had the vaccine many years ago had not revealed long term dangers. Now that avian leucosis viruses could be detected the logical step had been taken to use only chick tissue known to be free from contaminating viruses. Both measles vaccine and yellow fever vaccine were now being produced from leucosis virus-free eggs. All other animals used were bred in strict quarantine, and their tissue cultures had been far less troubled with contaminating viruses, though present confidence in their freedom from extraneous agents might be partly due to their limited use so far. The ideal would be a cell culture known to be free from all contaminating viruses, and much work was being directed towards that goal. Unfortunately prejudice was hindering acceptance of propagated cells. Until recently most tissues capable of indefinite propagation had been derived from tumours, giving rise to a population of transformed cells. The so-called "primary cell cultures," however, had been derived from tissues that had not been propagated. The ability to be propagated had thus come to be uniquely associated with malignant tissue. It was now known that a cell strain could be initiated from a human foetal lung tissue propagating for about fifty passages, without loss of their diploid character and with normal karyology throughout their life. Eventually they would die, being unable to be propagated further, and their normal character and finite life differentiated them from malignant cells.

Advantages of Cell Strains

A cell strain's greatest advantage was that it could be frozen in liquid nitrogen during tests for acceptability as a substrate. When it secured approval, the cell strain could be

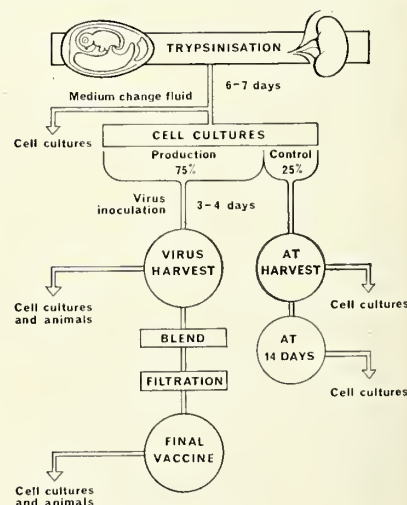


Fig. 1

thawed out to produce a fully characterised substrate for vaccine production.

Tests on Cell Substrate

Since it was better to prevent extraneous viruses from contaminating the vaccines than to try to detect them in the presence of a large population of vaccine virus, about 25 per cent. of the tissue used for vaccine production was set aside as uninoculated controls, and the tissue and fluids examined for extraneous viruses (fig. 1). The control tissue was treated identically with that used for vaccine production, and the fluids for examination were taken at the time the production tissue was used for virus inoculation and harvest. The control tissue was also incubated for 10-14 days after harvesting, and a further search was then made for extraneous viruses.

Tests on Virus Harvest

The virus harvest was also subjected to stringent tests for extraneous agents. They differed from those of the control-cell cultures in having a large population of vaccine virus to be neutralised with monospecific serum before the search was made. By tests in a number of different cell cultures and in small animals the attempt was made to cover all possible contaminating viruses. Extraneous agents were detected either by cytopathic or interference effects in cell cultures, or by clinical signs in animals. Contaminating viruses were most likely to be isolated at the time of harvest, because at that stage some vaccines were killed by adding formalin or β -propiolactone. With such vaccines it was essential to follow the course of virus inactivation, regarding any deviation from the normal as a danger signal. After a specific time of inactivation the material was tested to ensure complete inactivation and to reveal any extraneous agents.

"In-process" tests applied during production could be made only by the manufacturer, but all tests on the final bulk material were done by both the manufacturer and the control laboratory. Tests for extraneous agents were the most expensive and time-consuming. No test could be taken as an absolute guarantee that extraneous agents were absent. Confidence limits were similar to those of the final sterility tests. The pattern of safety testing of virus vaccines was now almost stereotyped, and the stages are summarised in fig. 2.

Potency Tests

Potency testing is equally important, since an innocuous but non-antigenic vaccine would give false security and might eventually cause the disease to reappear. Live virus vaccines conferred immunity by establishing an infection in the host, the index of potency being the virus titre of the vaccine. For killed vaccines, however, it was necessary to ensure that sufficient antigen was present by measuring the antibody responses in laboratory animals. The potency of a virus able to infect and kill small laboratory animals could be measured by an active challenge test

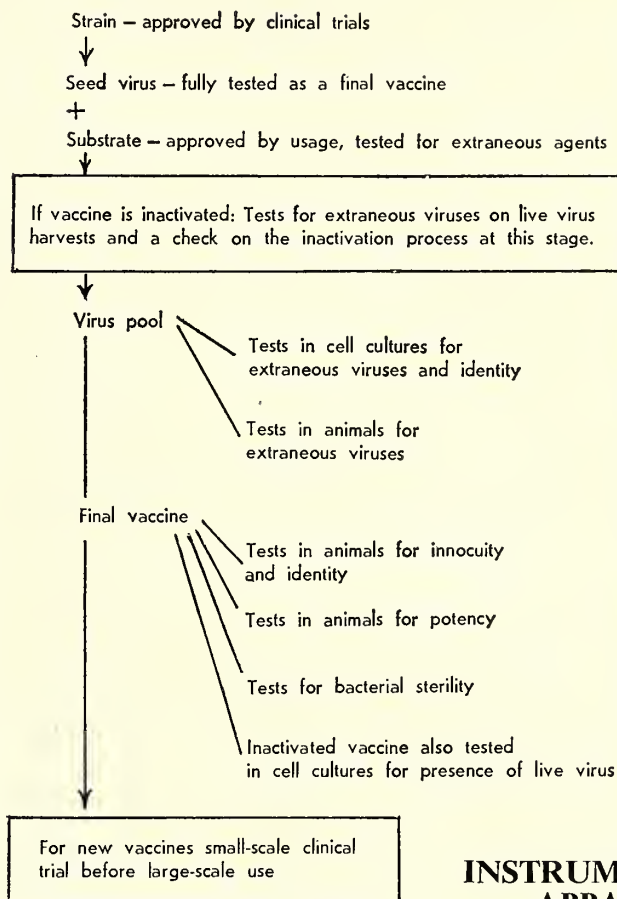


Fig. 2

with living virus. Most, however, could only be tested for potency by measuring the antibody responses of animals after a single dose. Ideally the vaccine should be checked for its ability to protect humans against the disease, but that was not always possible before the vaccine was used on a wide scale. It was possible, however, to compare antibody responses in humans with those of suitable laboratory animals, and once a correlation had been established each batch could be checked for antigenicity in animals.

Early tests on poliomyelitis vaccine had measured the height of antibody responses of each of twelve monkeys after three doses of undiluted vaccine. That test had proved insensitive, and it was now more usual to measure an "effective dose 50 per cent." (the dilution of vaccine which gives a measurable antibody response in 50 per cent. of the inoculated animals). The method had the advantages that the determination of the end point of antigen extinction was more accurate and that comparing the slopes of the dose-response curves obtained with a vaccine and reference preparation gave an indication of the similarity of the two products.

The Next Step

New findings in virology called for constant re-valuation of test methods. Undoubtedly the next step would be to ensure that all detectable oncogenic (tumour-forming) viruses were

eliminated. Recent evidence for viral hybridisation of a latent viral genome (tumour - antigen) with that of the vaccine virus was gaining much attention. It was possible to detect the genome by a fluorescent staining technique, which would be in routine use for vaccine testing in the near future.

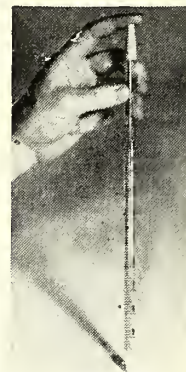
References

Those who wish to know more about the control of biological substances should refer to:—

Therapeutic Substances Regulations 1963, S.I. 1450-1459; 1964, S.I. 1076, 1077, 1430-1434; 1965, S.I. 1005; 1966, S.I. 498, 501-506. British Pharmacopoeia 1963 and Addenda 1965 and 1966. World Health Organisation Technical Report Series Nos. 179, 200, 274, 293, 323 and 329.

INSTRUMENTS AND APPARATUS

Long Life Pipettes.—Arnold R. Horwell, Ltd., 2 Grangeway, Kilburn High Road, London, W.6, offer a new type of precision borosilicate-glass graduated pipette of which the delivery



tip and mouth-piece are separate items machined from unbreakable Teflon material. By comparison with all-glass types, the pipette has a much greater service life, since the tip, normally the weakest part, cannot become chipped or broken. The inherent accuracy of the pipette is therefore maintained throughout its extended life. Delivery tip and mouth-piece are opaque-coloured to assist rapid identification of size, the colour coding conforming with British Standard Specification 3996:1966. The pipettes are individually tested and calibrated during manufacture and can be supplied with either serological or Mohr-type graduations. All markings are applied by a special process in which they become absorbed into the glass barrel and cannot, therefore, wear off. Mouth-piece and delivery tip are understood to withstand autoclaving, dry sterilisation and temperatures used to accelerate drying.

GUIDE TO NEW MEDICAMENTS

Information about proprietary products supplied principally on prescription. Reprints on perforated gummed paper for affixing to index cards are obtainable from the Editor. Notes on the products are given on p. 554.

THE CHEMIST AND DRUGGIST Guide to New Medicaments, Dec. 3, 1966

PENTRAL 80 Tempules

MANUFACTURER: Armour Pharmaceutical Co., Ltd., Hampden Park, Eastbourne, Sussex.

DESCRIPTION: Orange and clear capsules containing 80 mgm. of pentaerythritol tetranitrate in granular form. The granules have been processed with three coatings. The initial dose of 20 mgm. dissolves immediately after ingestion; four hours later the second dose of 30 mgm. dissolves and the third dose of 30 mgm. dissolves eight hours after ingestion.

INDICATIONS: Angina, coronary insufficiency.

CONTRAINDICATIONS: Glaucoma, cerebral haemorrhage; acute myocardial infarction.

DOSAGE: One Tempule morning and evening.

SIDE EFFECTS: Headache, fainting and skin reactions.

PACK: Container of 100 capsules.

FIRST ISSUED: October 1966.

PLACING ON C. & D. TABLET AND CAPSULE IDENTIFICATION GUIDE:

Multi-colour capsule, hard, F1, Clear, 28/32, —, —.

5 Contains orange and white granules.

THE CHEMIST AND DRUGGIST Guide to New Medicaments, Dec. 3, 1966

POLYBACTRIN cream

MANUFACTURER: Calmic, Ltd., Crewe Hall, Crewe, Ches.

DESCRIPTION: Cream containing in each gm. 3,300 units of neomycin sulphate, 400 units of zinc bacitracin and 5,000 units of polymyxin B. sulphate in a self-emulsifying cream base.

INDICATIONS: Impetigo, cellulitis, barbers rash, minor wounds, boils, burns, abscesses.

CONTRAINDICATIONS: Known sensitivity to the antibiotics.

METHOD OF USE: A little cream should be applied to the affected part twice daily or as prescribed.

SHELF LIFE: One year.

PACK: Tube of 15 gm.

SUPPLY RESTRICTIONS: Therapeutic Substances Act.

FIRST ISSUED: October 1966.

THE CHEMIST AND DRUGGIST Guide to New Medicaments, Dec. 3, 1966

POLYBACTRIN H.C. cream

MANUFACTURER: Calmic, Ltd., Crewe Hall, Crewe, Ches.

DESCRIPTION: Cream containing in each gm., 400 units of zinc bacitracin, 3,300 units of neomycin sulphate, 5,000 units of polymyxin B. sulphate and 10 mgm. of hydrocortisone acetate in a self-emulsifying cream base.

INDICATIONS: Dermatoses, varicose ulcer, eczema, acne vulgaris, pruritus.

CONTRAINDICATIONS: Known sensitivity to the antibiotics.

METHOD OF USE: A little cream should be applied to the affected part twice daily or as prescribed.

SHELF LIFE: One year. PACK: Tube of 15 gm.

SUPPLY RESTRICTIONS: Therapeutic Substances Act.

FIRST ISSUED: October 1966.

THE CHEMIST AND DRUGGIST Guide to New Medicaments, Dec. 3, 1966

XYLOPROCT PLAIN ointment and suppositories

MANUFACTURER: Astra-Hewlett, Ltd., King Georges Avenue, Watford, Herts.

DESCRIPTION: Ointment containing 50 mgm. of Xylocaine (lignocaine, equivalent to 62 mgm. of lignocaine hydrochloride), 35 mgm. of aluminium acetate, 180 mgm. of zinc oxide, 50 mgm. of Peru balsam and 50 mgm. of bismuth subgallate [both preparations contain 5 per cent. of Xylocaine]. Suppositories each containing 60 mgm. of Xylocaine (equivalent to 75 mgm. of lignocaine hydrochloride), 75 mgm. of aluminium acetate, 375 mgm. of zinc oxide, 100 mgm. of Peru balsam and 115 mgm. of bismuth subgallate.

INDICATIONS: Relief of pain and irritation associated with anal fissures, pruritus ani, anal fistulae and haemorrhoids. Pre- and post-operative patient management.

METHOD OF USE: The ointment should be applied before retiring and as directed by the physician. One suppository should be inserted on retiring and after each bowel movement.

PACKS: Ointment: Tube of 15 gm. Suppositories, container of ten.

SUPPLY RESTRICTIONS: Recommended on prescription only.

FIRST ISSUED: November 1966.

THE CHEMIST AND DRUGGIST Guide to New Medicaments, Dec. 3, 1966

OTRIVINE-ANTISTIN eye drops

MANUFACTURER: CIBA Laboratories, Ltd., Horsham, Sussex.

DESCRIPTION: Colourless liquid containing 0.05 per cent. w/v, of xylometazoline hydrochloride (Otrivine) and 0.5 per cent w/v of antazoline sulphate (Antistin). The eye drops have been sterilised in accordance with the B.P.C. recommendations for sterility.

INDICATIONS: All non-infective inflammatory conditions of the conjunctiva such as welder's flash, or irritation caused by smoke and dust. The eye drops are also suitable for conjunctivitis due to hay-fever and other allergic conditions affecting the eye.

METHOD OF USE: One or two drops should be instilled into the conjunctival sac, two or three times daily.

NOTES: In a few cases a slight transient smarting may occur. Infection, if present, should receive appropriate anti-bacterial therapy.

STORAGE: Should be protected from heat. Drops should not be used later than one month after first opening the container.

PACK: 10-mil. amber dropper bottle.

FIRST ISSUED: December 1966.

THE CHEMIST AND DRUGGIST Guide to New Medicaments, Dec. 3, 1966

OXATETS capsules and tablets

MANUFACTURER: Arthur H. Cox & Co., Ltd., 93 Lewes Road, Brighton, 7, Sussex. DISTRIBUTOR: Cox-Continental, Ltd., 85, Church Road, Hove, 3, Sussex.

DESCRIPTION: Red and black capsules, embossed "Co-tab 0/93", each containing 250mgm. of tetracycline hydrochloride. Yellow, sugar-coated tablets embossed "Co-tab 0/94", each containing 250 mgm. of tetracycline dihydrate.

INDICATIONS: All tetracycline-sensitive infections.

CONTRAINDICATIONS: History or suspicion of tetracycline allergy.

Caution is required in cases of renal or hepatic dysfunction and during the last three months of pregnancy and during early infancy, when there is a possibility of staining of the child's teeth, particularly as a result of long-term therapy.

DOSAGE: Adults: Four to eight tablets or capsules daily in divided doses after meals. Children under 14 years according to age and weight.

SIDE EFFECTS: Uncommon with the recommended doses. Nausea vomiting, diarrhoea or skin rashes may occur, and can be controlled, if mild, by either reducing the dosage or administering more frequent, smaller doses. If over-growth of resistant organisms such as staphylococci and monilia occurs, the antibiotic should be discontinued immediately.

SHELF LIFE: Two years.

PACKS: Tablets and capsules in containers of 100 and 1,000.

SUPPLY RESTRICTIONS: Therapeutic Substances Act.

FIRST ISSUED: November 1966.

PLACING ON C. & D. TABLET AND CAPSULE IDENTIFICATION GUIDE:

Oxatets capsules: Co-tabs 0/93.

Oxatets tablets: Co-tabs 0/94.

THE CHEMIST AND DRUGGIST Guide to New Medicaments, Dec. 3, 1966

EXTIL tablets

MANUFACTURER: Duncan, Flockhart & Evans, Ltd., Birkbeck Street, London, E.2.

DESCRIPTION: Deep buff, uncoated tablets each containing 6 mgm. of carbinoxamine maleate and 60 mgm. of pseudoephedrine hydrochloride.

INDICATIONS: Symptomatic relief of nasal congestion in the common cold, vasomotor and allergic rhinitis and hay fever.

CONTRAINDICATIONS: Should not be given to patients suffering from advanced hypertension or heart failure.

DOSAGE: Adults and children over 12 years: One tablet two or three times a day. Children (6-12 years): Half a tablet two or three times a day.

SIDE EFFECTS: Pseudoephedrine in clinical doses has very little pressor activity in normotensive individuals but minor side effects, similar to those encountered with ephedrine, may occur if the recommended dosage is exceeded. Alcohol may potentiate the effect of carbinoxamine with consequent drowsiness.

PACKS: Containers of twenty-five and 250 tablets.

SUPPLY RESTRICTIONS: P.L., S.7.

FIRST ISSUED: October 1966.

THE CHEMIST AND DRUGGIST Guide to New Medicaments, Dec. 3, 1966

CIDOMYCIN cream and ointment

MANUFACTURER: Roussel Laboratories, Ltd., Columbus House, Wembley Park, Middlesex.

DESCRIPTION: *Ointment* and *cream* in each gm. gentamicin sulphate equivalent to 3 mgm. gentamicin base. *Ointment* is in a petrolatum base and *cream* in a water miscible base comprising stearic acid, propylene glycol monostearate, isopropyl myristate, polyoxyethylene sorbitan monopalmitate and sorbitol solution with methyl- and butyl-parabens as preservatives.

INDICATIONS: All bacterial skin infections including primary infections such as impetigo, furunculosis, sycosis barbae, and pyoderma, and secondary infections such as infected burns, leg ulcers, wounds, dermatitis and dermatoses.

CONTRAINDICATIONS: Known sensitivity to a component of either preparation.

METHOD OF USE: Should be applied to the infected area two to four times daily or as prescribed by the physician. Removal of debris and crusts is advisable prior to application.

SHELF LIFE: Two years.

PACKS: *Ointment* and *cream* (each 0.3 per cent.), in tubes of 15 gm.

SUPPLY RESTRICTIONS: Recommended treat as Therapeutic Substances Act.

FIRST ISSUED: November 1966.

THE CHEMIST AND DRUGGIST Guide to New Medicaments, Dec. 3, 1966

CROOKES ACTH/CMC

MANUFACTURER: Crookes Laboratories, Ltd.; Houndmills Estate, Telford Road, Basingstoke, Hants.

DESCRIPTION: Corticotrophin, B.P., complexed with and dissolved in carboxymethylcellulose. Available in strengths of corticotrophin 20 i.u. and 40 i.u. per mil. Solution for injection (no warming necessary after refrigeration).

INDICATIONS: Rheumatoid arthritis, asthma, severe dermatitis.

CONTRAINDICATIONS: Acute psychosis, Cushing's syndrome, active peptic ulcer, osteoporosis, diabetes mellitus.

DOSAGE: 20-80 i.u. daily by subcutaneous injection according to the condition being treated (*see manufacturer's literature*).

SIDE EFFECTS: Usually a sign of overdose—moon face, hypertension, weight gain; dyspepsia. Usually reversible on withdrawal of the drug.

SHELF LIFE: Stored at 2-10°C. the shelf life is three years.

PACKS: 5-ml vials of 40 i.u./ml and 20 i.u./ml.

SUPPLY RESTRICTIONS: S.4b, Therapeutic Substances Act.

FIRST ISSUED: October 1966.

THE CHEMIST AND DRUGGIST Guide to New Medicaments, Dec. 3, 1966

EXOLAN cream

MANUFACTURER: Dermal Laboratories, Ltd., 247 Gray's Inn Road, London, W.C.1.

DESCRIPTION: Pale yellow vanishing cream containing 1 per cent. of triacetoxanthracene.

INDICATIONS: Psoriasis particularly of the scalp and other hairy regions.

METHOD OF USE: Should be applied twice daily to the affected areas.

PRECAUTIONS: Care must be taken to prevent the cream getting into the eyes.

PACK: Tube of 50 gm.

SUPPLY RESTRICTIONS: Recommended on prescription only.

FIRST ISSUED: December 1966.

THE CHEMIST AND DRUGGIST Guide to New Medicaments, Dec. 3, 1966

RYNABOND paediatric syrup

MANUFACTURER: Fisons Pharmaceuticals, Ltd., Loughborough, Leics.

DESCRIPTION: Blackcurrant and raspberry flavoured syrup, incorporating a sustained-action principle and containing in each 5 mls 5 mgm. of phenylephrine tannate, 12.5 mgm. of pheniramine tannate and 12.5 mgm. of mepyramine tannate.

INDICATIONS: Symptomatic relief of acute nasopharyngitis, sinusitis, rhinitis and allergic conditions in children.

CONTRAINDICATIONS: Sensitivity to sympathomimetic agents.

DOSAGE: *Children* (2 to 6 years): Half to one teaspoonful morning and evening; (6 to 12 years): One to two teaspoonfuls morning and evening.

STORAGE: Should be stored in a cool place.

PACK: Bottle of 4 fl. oz.

SUPPLY RESTRICTIONS: P.1., S.7.

FIRST ISSUED: November 1966.

THE CHEMIST AND DRUGGIST Guide to New Medicaments, Dec. 3, 1966

PERITRATE with phenobarbitone S.A. tablets

MANUFACTURER: William R. Warner & Co., Ltd., Eastleigh, Hants.

DESCRIPTION: Two-layer, two-tone yellow tablets each containing 80 mgm. of pentaerythritol tetranitrate and 45 mgm. of phenobarbitone.

INDICATIONS: Treatment of the anxious fearful angina patient.

DOSAGE: One tablet immediately on arising and one tablet twelve hours later (on an empty stomach).

PRECAUTIONS: Should be used with caution in patients with glaucoma.

SHELF LIFE: Two years.

PACKS: Containers of fifty and 500.

SUPPLY RESTRICTIONS: P.1., S.1., S.4A.

FIRST ISSUED: August 1966.

PLACING ON C. & D. TABLET AND CAPSULE IDENTIFICATION GUIDE:

Two-colour layered, D2, C3, 14/32, P, R, Cv/Cv, —, —.

THE CHEMIST AND DRUGGIST Guide to New Medicaments, Dec. 3, 1966

TOVA tablets

MANUFACTURER: The British Drug Houses, Ltd., Graham Street, London, N.1.

DESCRIPTION: White tablets containing 0.1 mgm. of ethinyloestradiol and pink tablets containing 0.1 mgm. of ethinyloestradiol and 25 mgm. of dimethisterone.

INDICATIONS: Irregular menstrual bleeding, menorrhagia, metrorrhagia, secondary amenorrhoea primary and membranous dysmenorrhoea, premenstrual tension, pain at ovulation.

CONTRAINDICATIONS: Fibroids; cancer of the breasts or genital tract; menstrual disorders due to organic disease of non-endocrine origin. Not recommended where there is a history of, or predisposition to, thrombophlebitis.

DOSAGE: Starting on day 5 of the menstrual cycle, counting the first day of bleeding as day 1, one white tablet should be taken daily for sixteen days, followed by one pink tablet for five days then a treatment-free period of seven days. The next course follows the treatment-free period. Treatment may need to be continued for several months to restore normal menstrual rhythm.

PRECAUTIONS: Should be administered under close medical supervision in patients with diabetes, hypertension, liver disease, renal disease, thyroid enlargement or thyroid disease.

PACK: Folder containing sixteen white and five pink tablets.

SUPPLY RESTRICTIONS: P.1., S.4b.

FIRST ISSUED: October 1966.

PLACING ON C. & D. TABLET AND CAPSULE IDENTIFICATION GUIDE:

White tablets: White, 9/32, P, R, F/F, B2, —.

Pink tablets: G7, 9/32, P, R, F/F, B2, —.

THE CHEMIST AND DRUGGIST Guide to New Medicaments, Dec. 3, 1966

C. & D. TABLET & CAPSULE IDENTIFICATION GUIDE.

New Products

CONCORDIN-5 tablets: C11, 8/32, C, R, Cv/Cv, —, —.

CONCORDIN-10 tablets: White, 8/32, C, R, Cv/Cv, —, —.

OXATETS capsules: Co-tabs 0/93.

OXATETS tablets: Co-tabs 0/94.

PERITRATE with phenobarb. S.A. tablets:

Two-colour, layered, D2, C3, 14/32, P, R, Cv/Cv, —, —.

PENTRAL-80 Tempules: Multi-colour capsule, hard, F1, Clear⁵, 28/32, —, —.

⁵ Contains orange and white granules.

Additions

BYDOLAX capsules: E2, 10/32, S, Ov, —, —, —.

Products changed in appearance

BENURIDE tablets: White, 12/32, P, R, F/F, B2, 285/360.

EQUAPRIN tablets: White, 16/32, P, R, Cv/Cv, —, M/—.

DARICON 5 mgm. tablets: G9, 9/32, P, R, Cv/Cv, —, 348/359.

NIAMID 25 mgm. tablets: C8, 12/32, P, R, Cv/Cv, —, 348/356.

NORINYL-1 tablets: White, 6/32, P, R, F/F, B2, N/M.

TRINURIDE tablets: White, 15/32, P, R, F/F, B2, 257/360.

ULTRAPEN 250 mgm. tablets: G3, 15/32, P, R, Cv/Cv, —, 348/358.

VATENSOL 10 mgm. tablets: G7, 9/32, P, R, Cv/Cv, —, 348/357.

WARFARIN 1 mgm. (WB) tablets: F10, 10/32, P, R, F/F, B2, H/—.

Additions to table of markings



356 357 358 359 360

TRADE REPORT

The prices given are those obtained by importers or manufacturers for bulk quantities or original packages. Various charges have to be added whereby values are in many instances augmented before wholesale dealers receive the goods into stock. Crude drugs and essential oils vary greatly in quality and higher prices are charged for selected qualities.

LONDON, NOVEMBER 30: The few price changes that occurred among CRUDE DRUGS during the week were about evenly balanced between rises and falls.

ACONITE continued its firm tone with the ROOT one penny per lb. dearer on the spot; meanwhile there were no shipment offers. CARDAMOMS were threepence per lb. dearer at origin and GENTIAN ROOT moved up 5s. per cwt. After several months of easing prices Costa Rican IPECACUANHA rose sixpence per lb. SAFFRON was 100s. per lb. up on previous rates. On the easier side were CHERRY BARK (down twopence to threepence per lb. according to holder). MENTHOL for shipment was a few pence easier with Chinese and Brazilian now about par. PEPPERS were distinctly easier and TURMERIC offers were shaded in a dull market. With Brazilian JALAP unobtainable at origin, spot holders were asking 1s. 11d. per lb. (against 1s. 10d.). Shipments of Tinnevely SENNA from the port of Tuticorin during October were as follows:—

	U.K. Tons	U.S. Tons	Europe Tons
SENNA	10	28	95
LEAVES	2	—	76
PODS	—	—	—

In ESSENTIAL OILS, red THYME was easier. PEPPERMINT OILS for shipment from both China and Brazil were down three-halfpence for lb. LAVANDIN and LAVENDER SPIKE from Spain were reported to be weak but PENNYROYAL was firm.

SODIUM PROPIONATE is being made available in bulk lots from a new source. There were no special price features in PHARMACEUTICAL CHEMICALS during the week.

Pharmaceutical Chemicals

AMINACRINE HYDROCHLORIDE.—B.P. is £24 per kilo.

AMPHETAMINE.—BASE, 150s. per kilo in 5-kilo lots, SULPHATE, 120s.; DEX-AMPHETAMINE, 270s. per kilo for 10 kilos.

AMYLOBARBITONE.—B.P.C. is 63s. per kilo for less than 100-kilo lots. SODIUM is 10s. per kilo more.

ATROPINE.—Per oz. for 16-oz. lots: ALKALOID and METHONITRATE, 39s.; METHYLBROMIDE, 38s. 6d.; SULPHATE, 34s.

BARIUM SULPHATE.—B.P., 50-kilo lots, 3s. 8d. to 3s. 9½d. as to package; 250-kilos from 3s. 3½d. to 3s. 5d.

BEMEGRIDE.—B.P.C. is 320s. per kilo.

BENZOCAINE.—B.P. is 13s. 2d. per lb. in 1-cwt. lots.

BISMUTH SALTS.—(Per kilo):—

Quantity	Under 50	50	250
	s. d.	s. d.	s. d.
CARBONATE ...	77 10	76 0	75 0
SALICYLATE ...	72 4	70 6	—
SUBGALLATE ...	67 10	66 0	—
SUBNITRATE ...	71 10	70 0	69 0

BROMIDES.—Crystals (per kilo):—

	Under 50 kilos	50 kilos
	s. d.	s. d.
POTASSIUM* ...	6 3	5 8
SODIUM ...	6 3	5 8
AMMONIUM ...	7 2	6 7

BRUCINE.—In 1,000-oz. lots, ALKALOID is 30s. per oz. and SULPHATE, 25s. per oz.

BUTOBARBITONE.—B.P.C. 77s. 6d. per kilo for 25-kilo lots and over.

CALCIUM CARBONATE.—B.P. light precipitated powder, 1-ton lots, £37 10s. per ton in free bags, ex works. PREPARED powder, £22 10s. per ton.

CALCIUM CHLORIDE.—Fused, 3s. 11d. per kilo in 12½-kilo tin for 100-kilo lots.

CALCIUM GLUCONATE.—1-4 cwt., 4s. 3d. lb.; 1-ton, 4s.

CALCIUM LACTATE.—B.P. is £412 per 1,000 kilo for 250-kilo lots.

CHLOROFORM.—35-litre lots in winchesters, B.P., 11s. 5½d. per litre; in drums, 10s. 7d.; 175-litre lots 11s. and 10s. 1½d.

CHLOROPHYLL.—Water soluble, 100 per cent. (medicinal grade), 250s. per lb.; oil soluble, 25s. per lb.

CHLORPHENESIN.—50-kilo lots are 72s. 6d. per kilo.

CINCHOCAINE.—HYDROCHLORIDE, B.P., is 850s. per kilo.

COCAINE.—35-oz. lots HYDROCHLORIDE, 105s. per oz., ALKALOID, 115s. per oz. Subject to D.D.A. Regulations.

CORTISONE.—One-kilo lots, ACETATE 4s. 6d.; HYDROCORTISONE ACETATE OF ALCOHOL, 4s. 6d. per gm.

CYCLOBARBITONE.—Under 25 kilos; 70s. per kilo. CALCIUM, 70s. per kilo.

DIENOESTROL.—B.P. is 1s. 3d. per gm. for 5-kilo lots.

DIGOXIN.—100-gm. lots are 44s. per gm.

DITHRANOL.—B.P. offered at 6s. 9d. per oz. for 7-lb. lots.

DOMIPHEN BROMIDE.—B.P.C. grade, 32s. per lb. in 1-cwt. lots.

EMETINE.—One-kilo lots HYDROCHLORIDE, 11,431s. per kilo.

ERGOMETRINE.—MALEATE, B.P., 152s. per gm. for 5-gm. lots; ERGOTAMINE TARTRATE, 29s. 6d. per gm. for 100-gm. lots.

ETHER.—Per lb. in winchesters; B.P. TECHNICAL, B.S.S., 5-cwt. 2s. 9d.; (4s. 4d. per litre). In drums the price is 2s. 1d. per lb. ANAESTHETIC, B.P., 6-cwt., 3s. 11½d.; 10-cwt., 3s. 7½d.

FORMALDEHYDE.—B.P. solutions, 5-drum lots, 710s. per ton, delivered.

GLUCOSE.—MONOHYDRATE, B.P., powder 71s. 6d. per cwt., delivered in 1-ton lots; ANHYDROUS, 134s. LIQUID, 43° Baumé, 54s. 6d. to 56s. 6d. per cwt. for 5-drum lots according to district.

GUAIACOLS.—LIQUID, B.P.C., 16s. per lb. for 1-cwt. lots; CRYSTALS, 15s. 9d.; CARBONATE, 18s.

HEXAMINE MANDELATE.—50 kilos lots, 27s. per kilo; 1,000 kilos, 23s. 6d.

HEXOBARBITONE.—25-kilo lots or over, 115s. per kilo.

HYOSCINE HYDROBROMIDE.—Per kilo, 3,418s. 10d.; METHYL BROMIDE, 3,589s. 9d.

HYOSCYAMINE SULPHATE.—Per kilo, 400s.

METHADONE HYDROCHLORIDE.—Subject to D.D.A. Regulations. 2s. 6d. per gm. for 100-gm. lots.

NARCOTINE.—ALKALOID and HYDROCHLORIDE, 11s. 4d. per oz. (399s. 6d. kilo) for under 35-oz. lots. Containers below 1-kilo charged 1s. 6d. per container.

NEOMYCIN.—SULPHATE, B.P., 590s. per kilo; 5-kilos, 550s. per kilo.

OESTRADIOL.—MONOBENZOATE, 14s. 6d. per gm.

OPIATES.—Home trade prices (per kilo) subject to D.D.A. Regulations.

	1 kilo and over	Under 1 kilo
	s. d.	s. d.
CODEINE	...	...
ALKALOID ...	1,093 0	1,939 0
HYDROCHLORIDE ...	1,665 0	1,701 0
PHOSPHATE ...	1,445 0	1,480 0
SULPHATE ...	1,665 0	1,701 0
MORPHINE	...	...
ACETATE ...	1,762 0	1,798 0
ALKALOID ...	2,159 0	2,194 0
HYDROCHLORIDE ...	1,762 0	1,798 0
SULPHATE ...	1,762 0	1,798 0
TARTRATE ...	2,115 0	2,150 0
ETHYLMORPHINE	...	...
ALKALOID ...	2,229 0	2,265 0
HYDROCHLORIDE ...	1,903 0	1,939 0
DIAMORPHINE	...	...
ALKALOID ...	2,105 0	2,141 0
HYDROCHLORIDE ...	1,930 0	1,965 0

PENICILLIN.—SODIUM, POTASSIUM OR PROCAINE, 2.25d. per mega for 5,000 megas.

PENTOBARBITONE.—Less than 100-kilo lots are 85s. 6d. per kilo for ACID and 90s. 6d. for SODIUM.

PETHIDINE HYDROCHLORIDE.—Subject to D.D.A. Regulations, 5-kilo lots, 300s. per kilo.

PHENACETIN.—B.P. one-ton lots, 6s. 3d. per lb.; 1-cwt., 6s. 9d.

PHENAZONE.—Imported, 9s. 6d. per lb.

PHENOBARBITONE.—Spot rates 50-kilo lots, 47s. 6d. per kilo. SODIUM SALT, 54s. 6d.

PHENOLPHTHALEIN.—One-cwt. 9s. per lb.

PHOLCODINE.—8-oz. lots, 91s. 6d. per oz. (3,227s. per kilo).

PHTHALYSULPHATHIAZOLE.—Five-kilo lots, 31s. per kilo.

QUINALBARBITONE.—SODIUM and ACID are 92s. 6d. for less than 25-kilo lots.

SODIUM CYCLAMATE.—Fifty-kilo lots offered at 9s. 2d. per kilo; 250 kilos, 9s. 1d. in free packages, delivered.

SODIUM PROPIONATE.—(Per lb.) 1-ton lots, 2s. 7d.; 1-cwt., 3s. 3d.

STREPTOMYGIN.—BASE OF SULPHATE, 2.85d. per gm.

STRYCHNINE.—100-oz. lots ALKALOID, 7s. per oz. SULPHATE and HYDROCHLORIDE, 6s.

SUCCINYL SULPHATHIAZOLE.—Five-kilo lots, 38s. 6d. per kilo.

SULPHACETAMIDE.—50-kilo lots, 54s. per kilo; SODIUM, 55s.

SULPHADIAZINE.—Five-kilo lots, 48s. 5d. per kilo; 50-kilo lots, 43s.

SULPHADIMIDINE.—50-kilo lots are 29s. per kilo.

SULPHAGUANIDINE.—100-kilo lots, about 19s. 6d. per kilo.

SULPHAMETHIAZOLE.—Per kilo, 5-kilo lots, 100s.; 50-kilos, 95s.

SULPHANILAMIDE.—50-kilo lots, 13s. 1d. per kilo.

SULPHAPYRIDINE.—Five-kilo lots, 120s. per kilo.

SULPHATHIAZOLE.—100 kilos, 32s. per kilo; 50 kilos, 33s.

ZINC CARBONATE.—25-kilo lots, 4s. 7d. per kilo.

ZINC CHLORIDE.—B.P.C. 1954, cake, 15s. 5d. per kilo; sticks, 19s. 2d.

ZINC OXIDE.—Two-ton lots, B.P. grade, are now £131 10s. per ton; 1 ton, £132 10s.

ZINC PEROXIDE.—One-cwt. lots of B.P., 5s. 3d. per lb.

ZINC SULPHATE.—B.P., 50 kilos, 3s. 6½d. per kilo.

Crude Drugs

ACONITE.—Short on spot. Spanish *napellus* offered at 3s. 3d. per lb.; no shipment offers.

AGAR.—Kobé No. 1, 23s. 6d. per lb. in bond; shipment, 22s. 9d., c.i.f. Spanish not offered.

ALOE.—(Per cwt.). Cape primes, spot, 18s.; shipment, 22s., c.i.f. and Curacao, 18s. spot; shipment, 36s., c.i.f.

ANISE.—Chinese STAR, 145s. per cwt. spot, duty paid, f.a.q. for shipment, 117s. 6d., c.i.f.

ANNATTO.—Madras, f.a.q. seed, spot, 18s. per cwt.; shipment, 22s., c.i.f.

BALSAMS.—(Per lb.): CANADA: Shipment, offered; spot, 29s. COPAIBA: B.P.C. spot, 18s. 6d.; shipment, 8s., c.i.f.; PERU: 17s., spot; shipment, January-February, 15s., c.i.f.; TOLU: B.P., from 12s. 6d.

BENZON.—Sumatra block B.P.C., spot 7 per cwt.

BUCHU.—Spot, 8s. 6d. per lb.; shipment offered.

CALUMBA.—Mozambique root, 125s. per lb. spot.

CAMPHOR.—B.P. powder for shipment, 4½d. per lb., c.i.f.; spot, 5s. 9d. duty paid.

CARDAMOMS.—(per lb.). Alleppy greens, 18s., spot; shipment, 16s., c.i.f. Prime seed, shipment, 31s., c.i.f., spot, 34s.

CASCARA.—Spot, 245s. per cwt.; shipment, 24s. peel offered at 245s., c.i.f.

CASSIA.—*Lignea*, whole for shipment, 255s. lb., c.i.f.; spot, 300s., duty paid.

CHAMOMILE.—Belgian flowers, 15s. to 16s. per lb., spot; German type, 7s. 6d.

CHERRY BARK.—Thin natural, on spot 3s. per lb.; shipment 2s. 10d., c.i.f.

CINNAMON.—Bark, Seychelles, 135s. cwt. spot; shipment, 105s., c.i.f.; QUILLS (c.i.f., per lb.). Ceylon; five O's, 10s. 2d.; firsts, 11d.; seconds, 9s.; quillings, 5s. 7d.

COCHINEAL.—(Per lb.). Canary Isle silver-vein, 15s. 6d. spot, 14s. 6d., c.i.f.; black brilliant, 17s. 6d., spot, 16s. 6d., c.i.f. Russian silver-grey, 13s., spot, and 12s. 6d., c.i.f.

COCILLANA.—Bark, 3s. 3d. per lb., on the spot. Scarce.

DANDELION.—Root is 160s. per cwt., spot; shipment, 155s., c.i.f.

ERGOT.—Portuguese—Spanish, spot, 11s. per lb.; shipment, 10s. 6d., c.i.f., nominal, continental, 9s., spot.

GENTIAN.—Root is firm at 205s. per cwt., spot, and 200s., c.i.f.

GINGER.—(Per cwt.). Nigerian split, 75s., spot; c.i.f. not offering; peeled, 170s., spot, shipment, 160s. African, spot, 225s., shipment, 207s. 6d., c.i.f. Jamaican No. 3, spot, 10s., shipment, not offering; Cochín, spot, 10s.; shipment, new-crop for December-January, reported sold at 160s., c.i.f.

GUM ACACIA.—Kordofan cleaned sorts, 7s. 6d. per cwt., spot; shipment, 173s., c.i.f.

HONEY.—(Per cwt.). Australian light number, spot, 120s. to 125s.; and medium number, 110s. to 115s. Argentine, 125s. to 140s.; Canadian, 175s. to 180s.; Mexican spot, 110s. to 115s.

HYDRASTIS.—Spot is 29s. with shipment offers also 29s., c.i.f.

IPECACUANHA.—Matto Grosso for shipment, 53s. per lb., c.i.f., spot, 55s. Costa Rican, 60s., spot; shipment, 56s., c.i.f. Colombian, spot, 52s. 6d. shipment, 51s., c.i.f.

KARAYA.—No. 1 f.a.q. gum, spot, 415s.; No. 2, 300s. per cwt.

KOLA NUTS.—West African halves are 7½d. per lb. on the spot; shipment, 7d. c.i.f.

LANOLIN.—ANHYDROUS, B.P. is from 2½d. to 2s. 6d. per lb. in 1-ton lots delivered free drums. Commercial grades from 1s. 7½d.

LEMON PEEL.—Spot, 1s. 9d. per lb.; partially extracted, 1s.

LIME FLOWERS.—Spot 2s. 2d. per lb.

LIQUORICE.—Natural root; Russian, 67s. 6d. per cwt.; Anatolian, 57s. 6d.; Anatolian decorticated, 170s. Block juice: Anatolian, 210s. to 220s. per cwt.; Italian block, 193s.; stick from 244s. to 460s. per cwt.

LYCOPODIUM.—Indian triple-sifted, 8s. 6d. per lb., spot.

MACE.—Whole No. 1, 13s. per lb., f.o.b. for forward delivery.

MENTHOL.—(Per lb.). Chinese for November-December shipment, 29s. 6d., c.i.f.; spot, 30s. 9d. in bond. Brazilian for shipment, 29s. 6d., c.i.f.; spot, 37s. 6d., duty paid.

MERCURY.—Spot £190-£200 per flask of 76 lb., ex warehouse.

NUTMEGS.—(Per lb.). West Indian, spot defectives, 6s. 3d. and 5s. 9d., c.i.f.; sound unsorted, 8s., spot; 80s., 12s., East Indian for shipment, b.w.p., 4s. 6d., c.i.f.; 110's, 9s. 1½d., c.i.f., 80's, 10s., c.i.f.

NUX VOMICA.—Cochin, 110s. per cwt. on the spot; shipment, 80s., c.i.f.

ORANGE PEEL.—Spot: Sweet ribbon, 1s. 8d. per lb., bitter quarters: West Indian, 10½d.; Spanish, 4s. 9d.

PEPPER.—White Sarawak, 3s. 7½d. per lb. spot; shipment, 3s. 4½d., c.i.f. Black Sarawak, 2s. 8d. spot; shipment, 2s. 7d., c.i.f. Black Brazilian grade one, 3s. 1½d., duty paid; Black Malabar, 305s., c.i.f.

PIMENTO.—Jamaican allocation at 740s. per cwt., c.i.f., delivered weights.

PODOPHYLLUM.—*Emodi* 200s., per cwt. spot; shipment, 175s., c.i.f.

QUILLAIA.—Spot is offered at 175s. per cwt.

RHUBARB.—Various grades offered at from 12s. to 30s. per lb. spot.

SAFFRON.—Mancha superior, spot, 850s. per lb.; Rio, 780s.

SARSAPARILLA.—Jamaican native red, spot, 4s. per lb.; shipment, 3s. 6d., c.i.f.

SEEDS.—(Per cwt.). ANISE.—Turkish 187s. 6d., duty paid. CARAWAY.—Dutch quoted at 157s. 6d., spot. CELERY.—Indian, 150s., spot sellers; shipment, 142s. 6d., c.i.f. CORIANDER.—Firm, Moroccan, 110s., and Rumanian splits, 120s., both duty paid; shipment Moroccan offered at 95s., c.i.f., splits 1966 crop quoted at 95s., c.i.f. CUMIN.—Spot, Cyprian, 285s., Indian, 290s., Moroccan, 290s., duty paid, Syrian, 285s., duty paid. DILL.—Indian, 120s. nominal; shipment quoted at 82s. 6d., c.i.f. FENNEL.—Chinese, 130s., duty paid; shipment, Indian, 132s. 6d., c.i.f., Chinese, 110s., c.i.f. FENUGREEK.—Moroccan, 85s., duty paid; shipment, 67s. 6d., c.i.f., sellers. MUSTARD.—English, 55s. to 90s., according to quality.

SENEGA.—Spot, 29s. 6d. per lb.; shipment, 29s., c.i.f.

SLIPPERY ELM BARK.—Spot offered at 3s. 9d. per lb.

SQUILL.—Italian, spot, 125s. per cwt.; shipment, 115s., c.i.f.

STRAMONIUM.—Continental LEAVES, 85s. per cwt., spot.

TONQUIN BEANS.—Para, spot, nominal shipments, no offers.

TRAGACANTH.—Ribbon, No. 1, £215 to £225 per cwt.; No. 2, £180 to £205.

TURMERIC.—Madras finger, 100s. per cwt., spot; shipment, 79s., c.i.f., quoted.

VALERIAN ROOT.—Indian, spot, 260s., per cwt.; shipment, 245s., c.i.f. Continental root, 510s., spot; shipment, 490s., c.i.f.

VANILLIN.—(Per lb.). 5-cwt. lots, 21s. 6d.; 1-cwt., 21s. 9d.; 56-lb., 22s.; small quantities, 22s. 6d.

WAXES.—(Per cwt.). BEES'—Most sources nominal. CANDELLILA, spot, 465s.; forward, 460s., landed. CARNAUBA, fatty grey, spot, 265s.; shipment, 262s. 6d., c.i.f.; prime yellow spot, 450s.; shipment, 400s., c.i.f.

WITCH HAZEL LEAVES.—Spot and shipment nominally 6s. 6d. per lb.

Essential and Expressed Oils

BAY.—From 41s. per lb. on the spot.

BIRCH TAR.—Rectified 10s. lb. on the spot.

BUCHU.—Spot, from 370s. to 400s. per lb.

CALAMUS.—Spot from 55s. to 60s. per lb.

CAMPOR, WHITE.—Chinese for shipment, 4s. 4d., c.i.f., per kilo; spot 2s. 6d. lb., duty paid.

CANANGA.—Spot from 32s. 6d. per lb.

CASTOR.—Home produced B.P. oil, spot, £140 per ton naked ex mill (2-ton lots).

CELERY SEED.—Indian, 100s. per lb.; English, 200's.

CITRONELLA.—Ceylon spot 4s. per lb.; shipment, 3s. 9d., c.i.f.; Formosan 4s. 5d. in bond and 4s. 10½d. c.i.f.; Chinese 4s. in bond; 4s. 3d. c.i.f.

COD-LIVER.—B.P. in 45-gall. drums is 12s. per gall, plus 30s. deposit on drum. Veterinary is from 9s. 10d. per gall. 25-stone lots. Delivered terms.

CORIANDER.—From 40s. per lb. spot.

DILL.—Imported from 36s. per lb., spot.

EUCALYPTUS.—Chinese, 80-85 per cent., 8s. 9d. per kilo in bond; shipment, 8s. 3d., c.i.f. Spanish, 12s., c.i.f.

GERANIUM.—Bourbon, 85s. to 87s. 6d., spot; Algerian, 75s.

GINGER.—Imported (per lb.); Indian, 165s.; Chinese, 75s.; Jamaican, 132s. 6d.

GRAPEFRUIT.—West Indian small lots on spot at 12s. 9d. per lb.

LAVANDIN.—Spanish from 20s. to 27s. per lb., as to quality.

LAVENDER.—French from 40s. to 60s. per lb. as to quality.

LAVENDER SPIKE.—Spanish from 23s. 6d. to 28s. per lb. on the spot.

LEMON.—Sicilian from 26s. to 36s.

NUTMEG.—East Indian B.P. oil is about 73s. per lb. English distilled, 110s.

ORANGE.—Cold-pressed sweet oil, 4s. 0d. to 6s. per lb.; Spanish, 20s.; Sicilian bitter, 65s.

PALMAROSA.—Shipment, 117s. 6d. per kilo, c.i.f.; spot, 130s.

PATCHOULI.—Spot, 57s. 6d. to 62s. 6d. per lb. duty paid; shipment, 47s. 6d., c.i.f.

PENNYROYAL.—Spot, 15s. per lb. duty paid; forward shipment, offers at 17s. duty paid.

PEPPERMINT.—(Per lb.). *Arvensis*: Chinese for shipment, 10s. 3d., c.i.f.; spot, 10s. 6d. Brazilian for shipment, 10s. 3d., c.i.f.; spot, 10s. 6d. *Piperita*: Italian spot, 75s.; forward shipment, 82s. 6d. American from 36s. to 56s., as to source.

PETITGRAIN.—Paraguay for shipment, 15s. 3d., c.i.f.; spot, 16s. 3d. per lb.

PIMENTO.—Imported BERRY, 110s.; English distilled, 390s.; LEAF, 24s. per lb.

PINE.—*Pumilionis*, 20s. per lb., *sylvestris*, 8s.; *abietis*, 14s.

ROSEMARY.—Spanish, 12s. per lb., duty paid.

RUE.—Spanish unobtainable on the spot.

SAGE.—Spanish, 21s. per lb.; Dalmatian 26s.

THYME.—Red, 27s. 6d. per lb. for 45-50 per cent., duty paid.

UNITED STATES REPORT

NEW YORK, NOVEMBER 29: Among PHARMACEUTICAL CHEMICALS, BRUCINE prices are 25 cents. per oz. lower with SULPHATE at \$2.25 and ALKALOID at \$3.00. A 5-cent reduction in the price of COPAIBA BALSAM to 85 cents to \$1.00 a lb. was the only important change in CRUDE DRUGS. In ESSENTIAL OILS, LAVANDIN fell 25 cents to \$4.00-\$4.50 a lb. Spot SANDALWOOD was 25 cents higher at \$17.00-\$17.25.

TRADE MARKS

APPLICATIONS ADVERTISED BEFORE REGISTRATION

"Trade Marks Journal," Nov. 23, No. 4604

For soaps, perfumery, being perfumes and perfumed non-medicated toilet preparations, essential oils, cosmetics, hair lotions, dentifrices (3)

SI-KO, 889,229, by A/S Si-Ko, Oslo, Norway.

For soaps, perfumes, cosmetics, non-medicated toilet preparations, preparations for the hair and dentifrices; all being perfumed with a rose fragrance (3)

ROSES IN THE RAIN, 885,536, by Helene Curtis Industries, Inc., Chicago, Illinois, U.S.A.

For perfumes, toilet preparations (non-medicated), cosmetic preparations, dentifrices, depilatory preparations, toilet articles (3)

LES NUANCES ALEZANES, B885,948, by L'Oreal, Paris, France.

For cosmetic preparations; non-medicated toilet preparation; soap, perfumes; dentifrices; preparations for the hair; and toilet articles (3)

SOFKIN, 889,992, by Organon Laboratories, Ltd., Morden, Surrey.

For soaps, soap powders, detergents (not for use in industrial or manufacturing processes) and preparations for laundry use (3)

BIOLAVARIL, 891,907, by Kortman & Schulte, N.V., Rotterdam-6, Holland.

For perfumes, non-medicated toilet preparations, cosmetic preparations, dentifrices, depilatory preparations, toilet articles, sachets for use in waving the hair, shampoos, soaps and essential oils (3)

ISLANDER, 891,982, by Stanley Home Products, Inc., Westfield, Massachusetts, U.S.A.

SOVRANITA, 895,711, by Richard Henry London & Rome, Ltd., London, N.19.

For preparations for the hair (3)

DEOCIN, 894,465, by F. W. Hampshire & Co., Ltd., Derby and London, W.1.

For perfumes; dentifrices; non-medicated toilet preparations; non-medicated preparations for the care of the mouth, and of artificial teeth; soaps; preparations and substances for laundry use; household cleaning preparations; polishing preparations (3)

NUDGE, 894,974, by Colgate-Palmolive, Co., New York, U.S.A.

For soaps, shampoos, oils, lotions, creams, gels and powders, all being for toilet and/or cosmetic purposes (3)

Device with words JOHNSON & JOHNSON, 830,542, by Johnson & Johnson, New Brunswick, New Jersey, U.S.A.

For pharmaceutical preparations and substances for the treatment of coughs, colds and the like respiratory ailments, all for human use (5)

CONTAC-E 876,301, by Smith Kline & French Laboratories, Ltd., Welwyn Garden City, Herts.

For pharmaceutical preparations in tablet, powder and liquid form for analgesic and sedative purposes (5)

BEXTRA, 887,526, by British Chemotheutic Products, Ltd., Bradford, Yorks.

For medicinal and pharmaceutical preparations and substances for human and veterinary use; sanitary substances; all consisting of or containing azoles (5)

THIPRAZOLE, 888,592, by Merck & Co., Inc., Rahway, New Jersey, U.S.A.

For mixtures of medicaments and toilet preparations, for use in the treatment of conditions of the skin, scalp, eyes, teeth, mouth and the nails; medicaments for incorporation in such mixtures; and deodorants for personal use (5)

GODESS, 889,691, by Colgate-Palmolive, Co., New York, U.S.A.

For deodorants and air freshening and air purifying preparations (5)

D.O.C.S. B890,282, by Airkem (Export), Ltd., Hitchin, Herts.

For disinfectants (5)

KILDROL, 891,094, by Hull Chemicals, Ltd., Kingston-upon-Hull.

For medicinal and pharmaceutical preparations and substances for human and veterinary use; sanitary substances (5)

VIVACTIL, 891,464, by Merck & Co., Inc., Rahway, New Jersey, U.S.A.

For pharmaceutical preparations having an anti-bacterial action (5)

FLOROFAC, 891,654, by Crookes Laboratories, Ltd., Basingstoke, Hants.

For veterinary preparations and substances (5)

FRANOZAN, 892,016, by Cooper, McDougall & Robertson, Ltd., Berkhamstead, Herts.

For antibiotics and antibiotic preparations, all for pharmaceutical and veterinary use (5)

ENOMYCETIN, 892,229, by Willows Francis, Ltd., London, E.8.

For pharmaceutical preparations and substances, all for veterinary use (5)

FOMAST, 892,283, by Stevenson, Turner & Boyce, Ltd., Reading, Berks.

For medicated preparations, for the scalp and skin, medicated preparations, liquid eye-washes, medicated lotions, medicated washes for human use, medicated paper, medicated pads for the eyes, breath freshening preparations and medicated oils (5)

Device with words OIL OF ULAY (OLAY), 893,366. Device with words ULAY VITAMIN NIGHT CREAM, 895,024, by Adams National (U.K.), Ltd., London, E.C.2.

For pharmaceutical substances for human and veterinary use (5)

FLUCORT, 893,651, by Syntex Corporation, Panama.

For inhalants (5)

PIB, 893,731, by Moore Medicinal Products, Ltd., Aberdeen, Scotland.

For pharmaceutical preparations and substances for human and veterinary use (5)

COSULONG, 893,959, by CIBA, Ltd., Basle, Switzerland.

For pharmaceutical preparations and substances (5)

ALIMETS, 894,028, by Boots Pure Drug Co., Ltd., Nottingham.

PATENTS

COMPLETE SPECIFICATIONS ACCEPTED From the "Official Journal (Patents)," Nov. 16

Process for the manufacture of tetracosapeptides having an adrenocorticotrophic action.

CIBA, Ltd. 1,053,177.

Benzene-sulphoamide derivatives. Merck & Co. Inc. 1,053,204.

Testosterone derivative. Jenapharm Veb. 1,053,208.

Peroxy steroids and methods for their manufacture. Scherico, Ltd. 1,053,214.

Detergent products. Ulster Oil Refineries, Ltd. 1,053,237.

Steroid compounds. Merck & Co. 1,053,248.

Dephenylamine derivatives. Rhone-Poulenc S.A. 1,053,269.

Detergent compositions. Procter & Gamble Co. 1,053,278.

Dyeing of hair and compositions and dyestuffs for such dyeing. L'Oreal. 1,053,300.

N,N'-disubstituted piperazines and process for their manufacture. CIBA, Ltd. 1,053,301.

Triamino-substituted 1,2-dihydro-1-hydroxy-1,3,5-triazines. Upjohn Co. 1,053,307.

Hair restoring preparation. C. A. Hewitt. 1,053,319.

Veterinary appliances. W. A. H. Forbes. 1,053,320.

Slow-acting fertilisers. Badische Anilin- & Soda-Fabrik, A.G. 1,053,336.

Compounds of the lignan series. Sandoz Patents, Ltd. 1,053,339.

Poly- α -olefin compositions and stabilizers therefor. Eastman Kodak Co. 1,053,362.

Nitro dyes for keratinous fibres. Unilever, Ltd. 1,053,369.

Flow control clamp. Abbott Laboratories. 1,053,397.

British patent specifications relating to the above will be obtainable (price 4s. 6d. each) from the Patent Office, 23 Southampton Buildings, Chancery Lane, London, W.C.2, from December 30.

From the "Official Journal (Patents)," November 23

Penicillins. Beecham Group, Ltd. 1,053,415 and 1,054,209.

α -Methylthio-cinnamic acid and derivatives. Meiji Seika Kaisha, Ltd. 1,053,417.

Production of carboxylic acid esters of unsaturated monohydric alcohols. Imperial Chemical Industries, Ltd. 1,053,421.

Basically-substituted oximes of 5H-dibenzo-(a,d)-10,11-dihydrocyclohepten-5-ones. Farbenfabriken Bayer, A.G. 1,053,429.

Photo-printing apparatus. Chemische Fabrick L. Van Der Grinten, N.V. 1,053,447.

Colchicine derivatives. Roussel-Uclaf. 1,053,499.

Diagnostic Agent. Pfizer & Co., Inc. 1,053,504.

Ergoline derivatives. Soc. Farmaceutici Italia. 1,053,507.

Cameras. Pentacon Dresden Kamera-Und Kinowerke Veb. 1,053,517.

Dyeing of hair. L'Oreal. 1,053,535.

Plasticised gelatine. Agfa-Gavaert, A.G. 1,053,568.

3 β -Acetyloxy-pregn-4-ene-6,20-diones and their preparation. Ayerst, McKenna & Harrison, Ltd. 1,053,573.

Isomerisation of vitamin A compounds. Chas. Pfizer & Co., Inc. 1,053,574.

Photographic material. Gavaert Photo-producten, N.V. 1,053,587.

Steroid compounds. Schering, A.G. 1,053,608-09.

Contraceptive suppositories. London Rubber Industries, Ltd. 1,053,615.

Silver halide sensitive photographic materials. Eastman Kodak Co. 1,053,631.

Regulation of plant growth. E.I. Du Pont De Nemours & Co. 1,053,635.

Rotary tableting machines. H. Kruse. 1,053,639.

Container closures. Armstrong Cork Co. 1,053,659.

Process for the manufacture of photographic silver halide emulsions. CIBA, Ltd. 1,053,670.

Process of preparing C₂₅ and C₃₀ polyonic aldehydes which are of the retinene series. A.E.C. Soc. De Chimie Organique Et Biologique. 1,053,680.

3,5-Dihalo-4-alkylthioanilines and their derivatives, and acaricidal compositions containing them. Farbenfabriken Bayer, A.G. 1,053,690.

Thiazole derivatives and therapeutically useful compositions containing the same. Fabriques De Produits De Chimie Organique De Loitre. 1,053,696.

Pancreas-based medicament. Eurorga. 1,053,702.

Anthelmintic compositions. Merck & Co., Inc. 1,053,703.

Razors. W. Neukomm. 1,053,719.

2-(2-(5-Nitro-2-furyl) vinyl) pyridine derivatives and process for preparation thereof. Dainippon Pharmaceutical Co., Ltd. 1,053,730.

Method of manufacturing collagen strands for surgical purposes and product produced thereby. Ethicon, Inc. 1,053,758.

Nematicides. Imperial Chemical Industries, Ltd. 1,053,762.

Process for the production of phosphate fertiliser. W. R. Grace & Co. 1,053,772.

Sulphonic acids and their salts. Henkel & Cie., G.m.b.H. 1,053,773.

Conenine derivatives. Koninklijke Nederlandsche Gist — & Spiritus-Fabriek, N.V. 1,053,774.

British patent specifications relating to the above will be obtainable (price 4s. 6d. each) from the Patent Office, 23 Southampton Buildings, Chancery Lane, London, W.C.2, from January 4, 1967.

NOTES ON NEW MEDICAMENTS

TOVA. — *Constituents:* Ethinyloestradiol and dimethisterone. Ethinyloestradiol is a powerful orally active oestrogen, and its general activity closely resembles in pattern that of the natural hormone. Dimethisterone is the 6 α :21-dimethyl derivative of ethisterone, and is a potent progestogen, but without androgenic or oestrogenic side effects. Sequential treatment with these drugs simulates the secretory pattern of the ovarian hormones and, in cases of amenorrhoea, a priming course of oestrogen, followed by a suitable progestogen, can invoke endometrial changes and subsequent withdrawal bleeding. Such phased treatment is of value in a wide range of menstrual disorders, and prolonged treatment may result in a restoration of the normal rhythm.

PRINT AND PUBLICITY

A TELEVISION "commercial" for Mentholatum "Deep-Heat" rub has gained the premier award and diploma for cartoon animation (over 30 sec.) in a competition for filmed television "commercials" at the Cork international film festival and the Hollywood advertising Club award for "one of the world's best broadcasting advertisements." The "commercial" symbolises rheumatic pain by means of a slowly and continuously coiling rope denoting cramped and tensed up muscles. "Deep Heat" is seen being rubbed in, and the rope gradually relaxes as the muscles are freed. The commercial was produced for the American affiliate of Mentholatum Co., Ltd., Slough, Bucks, and the British version is being screened on I.T.V. from January 1967.

Medical Propaganda

Manufacturers' leaflets, folders, booklets, etc., directed to doctors but available to pharmacists.

ARMOUR PHARMACEUTICAL CO., LTD., Eastbourne, Sussex: "Pentrol 80 Temples" (file card).

CALMIC, LTD., Crewe, Chcs: "Polybactrin cream and polybactrin HC cream" (4-p. leaflet).

CIBA LABORATORIES, LTD., Horsham, Sussex: "Otrivine — Antistin . . . nasal solution and sterile eye-drops" (file card).

COX-CONTINENTAL, LTD., Church Road, Hove, 3, Sussex: "Oxatets" (file card).

CROOKES LABORATORIES, LTD., Basingstoke, Hants: "Crookes ACTH/CMC . . . injects like saline — lasts like gel" (10-p. booklet).

LABORATORIES FOR APPLIED BIOLOGY, LTD., 91 Amhurst Park, London, N.16: "Duromorph . . . long-acting morphine aqueous suspension" (4-p. leaflet).

MAY & BAKER, LTD., Dagenham, Essex: "Tixylix . . . children's cough, linctus" (4-p. folder). "Penitriad . . . for economical broad-spectrum antibacterial therapy" (4-p. folder).

MERCK SHARP & DOHME, LTD., Hoddesdon, Herts: "Tryptizol syrup . . . a new approach to enuresis" (6-p. folder).

ROUSSEL LABORATORIES, LTD., Columbus House, Wembley Park, Middlesex: "Cidomycin ointment and cream . . . superior treatment for any bacterial skin infection" (8-p. leaflet).

SMITH & NEPHEW PHARMACEUTICALS, LTD., Welwyn Garden City, Herts: "Fluorets . . . sterile ophthalmic applicators" (file card).

THE BRITISH DRUG HOUSES, LTD., Graham Street, London, N.1: "Tova . . . for treatment of menstrual disorders" (4-p. leaflet).



FOR THE HANDBAG: Trial (handbag) size of Hymosa Lotion now available from New Eva Laboratories, Ltd., 87 Saffron Hill, London, E.C.1.

COMING EVENTS

Items for inclusion under this heading should be sent in time to reach the Editor not later than first post on Wednesday of the week of insertion.

Monday, December 5

ENFIELD CHEMISTS' ASSOCIATION, Kings Head hotel, Market Place, Enfield, at 7.45 p.m. Mr. C. C. Stevens (a member of Council) on "The Pharmaceutical Scene 1966-67."

MID-GLAMORGAN BRANCH, PHARMACEUTICAL SOCIETY, York hotel, Bridgend, at 8 p.m. Mr. F. J. Turner (Kodak, Ltd.) on "Taking Pictures in Colour." Also formulation of Branch resolutions.

NORTHAMPTON BRANCH, PHARMACEUTICAL SOCIETY, Coronation room, Wedgwood restaurant, Abington Street, Northampton, at 8 p.m. Dr. R. W. Edwards (Water Pollution Research Laboratory) on "Water Pollution Problems in Great Britain."

NORTH LONDON PHARMACISTS' ASSOCIATION, Beale's restaurant, Holloway Road, London, N.7, at 8 p.m. Speaker: Mr. S. Bull (National Dairy Council). Wine and cheese evening.

SOUTH-WEST LONDON CHEMISTS' ASSOCIATION, Lambeth town hall, at 8 p.m. Mrs. E. J. M. Leigh (a member of Council) on "Pharmaceutical Service and Responsibility."

WHOLESALE GIFT BUYERS' FAIR, Mount Royal hotel, Marble Arch, London, W.1. Until December 15.

Tuesday, December 6

BRITISH PLASTICS FEDERATION, National College of Rubber Technology, Northern Polytechnic, Holloway Road, London, N.7. Two-day symposium on "Toxicity in Plastics."

DARTFORD BRANCH, PHARMACEUTICAL SOCIETY, Royal Victoria and Bull hotel, High Street, Dartford, at 8 p.m. Mr. B. Lynn (Beecham Research Laboratories) on "Development and Use of Semi-synthetic Penicillins."

EAST KENT BRANCH, PHARMACEUTICAL SOCIETY, County hotel, Canterbury, at 7.45 p.m. Speaker from Elida, Ltd., on "Hair Colourants."

HARROW BRANCHES, PHARMACEUTICAL SOCIETY and BRITISH MEDICAL ASSOCIATION, Whittington hotel, Cannon Lane, Pinner, at 8.30 p.m. Discussion on "Doctor — Pharmacist Relationship." Speakers: Dr. H. T. Foot, Dr. R. Granville-Mathers, Mr. G. Bryan, Mr. K. Jenkins.

IPSWICH AND SUFFOLK BRANCH, PHARMACEUTICAL SOCIETY, Civic College, Rope Walk, Ipswich, at 7.30 p.m. Dr. R. J. Boscott (exploratory research adviser, Pfizer group) on "Steroid Hormones" (lecture course).

SUNDERLAND BRANCH, NATIONAL PHARMACEUTICAL UNION, Roker hotel, Sunderland, at 8 p.m. Open forum "Where Have all the 'Pennies' Gone?"

WOKING BRANCH, PHARMACEUTICAL SOCIETY, Ship hotel, Weybridge, at 7.30 p.m. Annual dinner and dance. Ticket (£2 2s.) from secretary.

WORCESTER CITY AND COUNTY BRANCH, PHARMACEUTICAL SOCIETY, Star hotel, Worcester, at 8 p.m. Dr. P. S. J. Spencer (University of Aston) on "Pharmacology of Anti-depressant Drugs."

Wednesday, December 7

FIFE BRANCH, PHARMACEUTICAL SOCIETY, Station hotel, Kirkcaldy, at 7.30 p.m. Annual dinner and dance.

PHARMACEUTICAL GROUP, ROYAL SOCIETY OF HEALTH, Flemings hotel, Half Moon Street, London, W.1. at 7.30 p.m. Dinner (ticket £3 10s.). Lord Balmiel on "Mental Health."

PHARMACEUTICAL SOCIETY OF GREAT BRITAIN, 17 Bloomsbury Square, London, W.C.1, at 6 p.m. Mr. J. W. Hadgraft (chief pharmacist, Royal Free Hospital) on "Pharmaceutical Science and the Hospital Pharmacist." (Harrison Memorial lecture.)

READING BRANCH, PHARMACEUTICAL SOCIETY, Upper Deck hotel, Reading at 8 p.m. Christmas buffet dance.

WESTERN PHARMACISTS' ASSOCIATION, Great

Western hotel, Paddington Station, London, W.2, at 7.30 p.m. Lecture and demonstration by representative of Elizabeth Arden, Ltd.

Thursday, December 8

BEDFORDSHIRE BRANCH, PHARMACEUTICAL SOCIETY, Cross Keys hotel, Pulloxhill, at 7.30 p.m. Christmas dinner (approximate cost 17s. 6d.). Intending diners should inform Bedford 53484 or Luton 23262.

BIOLOGICAL METHODS GROUP, SOCIETY FOR ANALYTICAL CHEMISTRY, Feathers hotel, Tudor Street, Fleet Street, London, E.C.4, at 6.30 p.m. Annual meeting. Informal discussion on "Principles of Immuno-assay" opened by Dr. K. W. Taylor (Kings College Hospital Medical School).

BRISTOL BRANCH, PHARMACEUTICAL SOCIETY, Cahot House, Bristol College of Science and Technology, Ashley Down, Bristol, 7, at 7.30 p.m. Quiz between Branch members and students of pharmaceutical department on non-pharmaceutical subjects.

CHELSEA PHARMACY ASSOCIATION, College Hall, Manresa Road, London, S.W.3, at 7.30 p.m. Christmas party. Ticket (4s.) at door.

DURHAM BRANCH, PHARMACEUTICAL SOCIETY, Three Tuns hotel, Durham, at 8 p.m. Mr. W. Low on "Functions of the Executive Council and Pharmaceutical Committee."

GLASGOW AND WEST OF SCOTLAND BRANCH, PHARMACEUTICAL SOCIETY, Room 24, University of Strathclyde, Glasgow, C.1, at 7.45 p.m. Speaker from Kodak, Ltd., on "8-mm. Cine Photography."

LEEDS BRANCH, PHARMACEUTICAL SOCIETY, Griffin hotel, Leeds, at 8 p.m. Mr. J. A. Myers (a member of Council) on "Proposed Revision of Advertising Rules."

NORTHERN SCOTTISH BRANCH, PHARMACEUTICAL SOCIETY, Clansman hotel, Inverness, at 8.15 p.m. Mr. G. Smith (department of pharmaceutical sciences, Edinburgh) on "The 1966 B.N.F."

SLOUGH BRANCH, PHARMACEUTICAL SOCIETY, Aspro-Nicholas, Ltd., Slough, at 8.15 p.m. Mrs. M. E. Smith (senior lecturer, department of agriculture, Aylesbury College of Education), on "Wine Making at Home."

Friday, December 9

MICROCHEMICAL METHODS GROUP, SOCIETY FOR ANALYTICAL CHEMISTRY, Burlington House, Piccadilly, London, W.1, at 7.15 p.m. Mr. R. Goulden (Shell Research, Ltd.) on "Some Microchemical Methods of use in Pesticides Analysis."

Courses and Conferences

SCHOOL OF PHARMACY, LEICESTER REGIONAL COLLEGE OF TECHNOLOGY, Leicester. Course of six lectures on "Principles and Practice in the use of Pesticides." Commencing January 10, 1967. (Fee. 30s.; course organiser: R. M. Ridgway.)

IMPROVING RETAILING EFFICIENCY WITH MODERN MANAGEMENT METHODS. Two-day course organised by Industrial and Commercial Techniques, Ltd., 30 Fleet Street, London, E.C.4. Manchester, February 21-22, 1967 and London, February 28 to March 1, 1967.

WORLD TRADE

Aspirin to be Made in South Africa. — At the annual meeting of Norichem (Pty.) Ltd., in Pretoria, Professor S. P. du Toit Viljoen (chairman) said that the organisation would in the near future expand its activities in the salicylic acid field by establishing a plant for the local manufacture of technical salicylic acid from phenol. In a few years' time, he promised, acetyl salicylic acid tablets available locally would be completely South African produced.

Prescribers Press

What doctors are reading about developments in drugs and treatments

ABUSE of analgesics seems to be a prevalent and dangerous custom, concludes Dr. L. F. Prescott (lecturer in therapeutics, University of Aberdeen) following a survey of patients with renal disease at Aberdeen Royal Infirmary. Thirty-six patients (thirty-one female and five male) were found to have had a history of analgesic abuse—defined as a daily intake of two or more analgesic tablets or powders for at least two years. Ten patients have died, six as a result of renal failure. All patients displayed evidence of impaired renal function, thirty were anaemic and six had peptic ulceration. The analgesic preparation favoured by twenty-one of the patients was compound codeine (Codis) tablets; nine preferred Askit powders. Thirteen took powder preparations rather than tablets. The known duration of analgesic abuse ranged from two to forty years (mean 14.2 years); and the quantity taken varied from two to three tablets daily to twelve Askit powders, plus fourteen Anadin tablets daily. Among twenty-nine patients about whom information could be obtained eighteen had taken barbiturates regularly for long periods. In discussing the reasons for abuse, the author draws attention to the fact that eight patients regularly took large quantities of analgesics as stimulants, using them as "pick-me-ups." He notes that many local chemists make up their own powders, which often contain large amounts of analgesic drugs. On the drugs that might be incriminated as nephrotoxic agents Dr. Prescott records that in all but one patient (who had taken aspirin and paracetamol) the abuse was of analgesics containing phenacetin, though he believes that in the past phenacetin has been incriminated more by inference than on proof. It is necessary, he says, to keep an open mind until ade-

quate toxicological and epidemiological evidence is forthcoming. An interim warning to the public of the dangers of analgesic abuse should also be considered. (*Lancet*, November 26, p.1143.)

SILVER nitrate (0.5 per cent.) compresses have been shown in a controlled trial to be of outstanding value in preventing the contamination of burns. The trial was carried out at the Medical Research Council industrial injuries and burns research unit, Birmingham Accident Hospital, on patients with burns affecting more than 15 per cent. of the body surface. Comparative treatments were silver nitrate and penicillin-G creams (both in a lanette-wax base) and chlorhexidine diacetate (0.1 per cent.) compresses. The 0.5 per cent. silver nitrate cream showed significant effects similar to those of the compresses, though smaller. The greatest effect was against *Ps. aeruginosa* and proteus species. The pseudomonad was found in only 3.1 per cent. of swabs after silver nitrate compress treatment, against 70 per cent. of swabs after penicillin treatment. There was less effect against *Staph.-aureus* and none against certain coliform bacilli. Silver-nitrate applications were associated with lower mean temperature and respiration rates, and the applications, though uncomfortable, were not painful. (*B.M.J.*, November 26, p. 1288.)

CONTEMPORARY THEMES

Subjects of contributions in current medical and technical publications

- BURNS: Antiseptic and aseptic prophylaxis for. Use of silver nitrate and of isolators. *Brit.med.J.*, November 26, p. 1288.
- SUXAMETHONIUM CHLORIDE. Unusual reaction to. *Brit.med.J.*, November 26, p. 1305.
- ANALGESIC ABUSE and renal disease in North-east Scotland. *Lancet*, November 26, p. 1143.
- PROPRANOLOL. Effect of in mild hypertension. *Lancet*, November 26, p. 1148.
- METHISAZONE. Adenovirus multiplication: inhibition by. *Science*, November 11, p. 796.
- CORTICOTROPIN in generalised myasthenia gravis. *J.Amer.med.Ass.*, November 14, p. 703.
- ALLOPURINOL in the treatment of resistant gout. *J.Amer.med.Ass.*, November 14, p. 708.
- FLUOROURACIL. Breast cancer treated with. *J.Amer.med.Ass.*, November 14, p. 724.

- DRUG DEPENDENCE. *Canad.pharm.J.*, October p. 26.
- NAMING AND CLASSIFYING DRUGS. *J.Amer.Pharm.Ass.*, November.
- THE ANTHELMINTIC PYRANTEL TARTRATE. Field trials in sheep with. *Vet.Rec.*, November 26, p. 626.
- L-GLUTAMIC ACID. Failure of, to increase absorption of vitamin B₁₂ by patients with pernicious anaemia. *Nature*, November 26, p. 947.
- TRANSDUCTION OF ANTIBIOTIC RESISTANCE in *Staphylococcus aureus*. *Lancet*, November 19, p. 1107.

NEW COMPANIES

- P.C.=Private Company, R.O.=Registered Office.
- BREETS BROOK, LTD. (P.C.).—Capital £100. To carry on the business of selling agents and consultants to the pharmaceutical chemical traders, etc. Subscribers: Jean Herbert and Thomas A. Herbert, 156 Strand, London, W.C.2.
- CEDRIC RICHARDSON, LTD. (P.C.).—Capital £100. To carry on the business of analytical and dispensing chemists, etc. Directors Arthur C. Richardson, M.P.S. and Hazel W. Richardson, R.O. 49 Carfax, Horsham, Sussex.
- CHEMICAL FACILITIES, LTD. (P.C.).—Capital £500. To carry on the business of chemists, druggists and manufacturers of and dealers in pharmaceutical and other preparations, etc. Subscribers: Stanley H. Davis and David Ordish, R.O.: Rear of Peterbourn Court, Petersfield Road, Birmingham.
- C.M.G. (PERFUMERS), LTD. (P.C.).—Capital £100. Subscribers: Stanley H. Davis, and David Ordish, R.O.: 23 Albemarle Street, London, W.1.
- CONTINUOUS FILTRATION, LTD. (P.C.).—Capital £100. To carry on the business of manufacturers of and dealers in continuous filtration units, etc. Directors: Charles J. Martin, Peter L. Gulliver, David R. Ball and Norman B. Pollock, R.O.: 5 Church Hill, Epping, Essex.
- HETEGLEN, LTD. (P.C.).—Capital £100. To carry on the business of wholesale and retail chemists and druggists etc. Subscribers: Leonard H. Lewis and Francis A. Dean, 6 Surrey Street, London, W.C.2.
- H. H. DRUG STORES, LTD. (P.C.).—Capital £100. Directors: Robin J. Harris, 5 Rokeby Gardens, Woodford Green, Essex and Hymie Z. Harris.
- WAINWRIGHT (BISHOPSTOKES), LTD. (P.C.).—Capital £100. To carry on the business of manufacturing and wholesale and retail chemists, etc. Directors: Frank T. Wainwright, Ellen L. Wainwright and Clara E. Hann, R.O. 88 Market Street, Eastleigh, Hants.

COMMERCIAL TELEVISION

The information given in the table is of number of appearances and total screen time in seconds. Thus 7/105 means that the advertiser's announcement will, during the week covered, be screened seven times and for a total of 105 seconds.

Period—December 11-17

PRODUCT	London	Midland	North	Scotland	Wales & West	South	North-east	Anglia	Ulster	Westward	Border	Grampian	Eireann	Channel Is.
Alka-Seltzer ...	5/200	5/200	5/200	5/200	8/300	5/200	8/300	5/200	5/200	5/200	5/200	5/200	5/200	5/200
Anadin... ..	3/90	3/67	3/90	2/60	3/90	2/60	2/60	2/60	3/90	2/60	1/30	2/60	—	3/90
Askit powders and tablets ...	—	—	—	7/49	—	—	—	—	—	—	3/21	2/14	—	—
Buttercup syrup ...	—	1/15	3/60	—	—	—	—	—	—	—	2/30	—	—	—
Contac 400 ...	3/90	4/120	4/120	1/30	2/60	3/90	1/30	4/120	4/120	2/60	3/90	4/120	—	—
Disprin ...	1/15	1/15	1/15	1/15	1/15	1/15	1/15	—	1/15	1/15	1/15	—	—	1/15
Fiery Jack ...	—	—	—	—	2/30	—	—	—	—	—	—	—	—	—
Hill's sore throat lozenges ...	—	—	3/45	—	—	—	—	—	—	—	—	—	—	—
Nulon ...	4/120	1/30	3/90	2/60	3/90	1/30	2/60	1/30	2/60	7/210	2/60	2/60	—	2/60
Owbridges cough mixture ...	5/75	2/30	3/45	—	3/45	2/30	2/30	5/75	—	3/45	—	—	—	4/60
Penetrol inhalant ...	1/7	2/14	2/14	1/7	1/7	—	1/7	1/7	—	—	—	—	—	—
Philishave ...	3/90	4/120	3/90	4/120	3/90	3/90	3/90	3/90	4/120	3/90	3/90	3/90	—	6/180
Polaroid Swinger Camera ...	3/90	3/90	3/90	4/120	3/90	4/120	3/90	4/120	4/120	4/120	2/60	3/90	—	3/90
Ronson Escort hairdryer ...	7/315	7/315	7/315	7/315	7/315	7/315	7/315	7/315	7/315	7/315	7/315	7/315	7/315	—
Sparklets syphons ...	2/60	2/60	2/60	2/60	2/60	2/60	2/60	2/60	—	2/60	2/60	2/60	—	2/60
Steradent ...	—	1/45	1/45	1/45	2/90	—	1/45	1/45	—	3/135	3/135	3/135	—	1/45
Wright's coal tar soap ...	1/15	1/15	1/15	—	—	1/15	—	1/15	—	1/15	1/15	—	—	—

cumulative price changes

AMENDING C & D QUARTERLY PRICE LIST FOR DECEMBER 1966

[illegible]

the original half-volume, ideally balanced, **TRIPLE ANTIGEN**

TRIVAX



BURROUGHS WELLCOME & CO. (*The Wellcome Foundation Ltd.*) LONDON

* DIPHTHERIA

* TETANUS

* WHOOPING COUGH

Gardenal (971 P5MB) †s4A	tablets 60 mgm	100	20	0	—	2	5
	1000	106	0	—	—	13	3
sodium powder	25gm	58	0	—	—	7	3
	tablets 86 mgm	—	—	—	—	—	—
Gargon (1176 Squibb) TSVP0	(vet.)	6cc	30	0	—	3	9
	Gibbs (509 Gibbs)	dentifrice	10	7	2	11	1
fluoride tooth-paste	17	9	4	10½	2	4	
	26	6	7	3½	3	7	
Gillette (514 Gillette)	razor Techmatic	—	—	—	42	0	
	replaceable cartridge	—	—	—	8	11	
Godde (280 CP) 5 pack minimum order	hair spray standard	37	6	10	3	5	6
	large	47	8	13	0	7	0
shampoo	sachet	17	9	4	10	10	
	bottle (3 doz)	13	2	3	7	1	10½
Goya (532 Goya)	CedarWood	41	10	11	2½	6	2
	shampoo	807	26	7	3½	4	1
Grossmith's (544 Grossmith)	talcum	30	0	8	6	4	9
	Hard as Nails (43 Amropa)	hair colour tube	22	6	6	2½	3
Harmony (412 Elida)	Hartnell (1376 Hartnell)	(distributors 544 Grossmith)	10	3½	5	9	
	eye shadow	37	6	8	6	5	2
lipstick refill	34	0	8	6	5	2	
	rouge cream	23	6	6	5½	3	7
Hepatex-T (394 DF)	Heptonal (1531 Delandale)	(distributors 1077 Rona)	10	3	5	9	
	Moneyfruit (175 BCP)	health food	7oz	45	0	—	4
16oz	82	5	—	—	8	9	
Icilma (509 Gibbs)	vanishing cream	8	6	2	4	1	2
	15	10	4	4½	2	3	
Ilford (645 Ilford)	colour films	Colorprint 20exp.	12	10ea	1	5ea	18
	Rapid	9	4ea	1	1ea	13	6
Colorslide 20exp.	12	1½ea	1	4ea	17	6	
	36exp.	18	8ea	2	1ea	27	0
Colorslide Super	8exp.	8	4ea	1	1ea	12	0
	20exp.	13	5ea	1	6ea	19	11
36exp.	20	1ea	2	3ea	29	0	
	Rapid	11	9ea	1	4ea	17	0
Colorcine '25'	holiday pack	49	4ea	5	6ea	71	3
	Ilfochrome 8mm '100'	55	4½ea	6	2ea	80	0
In Love (1376 Hartnell)	(distributors 544 Grossmith)	perflume HL4½	550	0	151	3	83
	Junivite (147 Boots)	syrup	4oz	22	0	—	2
8oz	40	0	—	—	5	0	
Kent (693 Kent)	toothbrushes	"De Luxe"	63	4	—	7	11
	"Classic"	44	0	—	—	5	6
"Vessier"	60	0	—	—	7	6	
	ex. hard	63	4	—	—	7	11
"Park Lane" ex. hard	31	4	—	—	3	11	
	"Contour"	31	4	—	—	3	11
"Pedigree" ex. hard	31	4	—	—	3	11	
	"Harley Street"	26	0	—	—	3	3
"Olympic" nylon	22	0	—	—	2	9	
	"KB42" badger	52	0	—	—	6	6
denture brush	"Clinic"	31	4	—	—	3	11
	Kinidin Durules (68 AH)	tablets	30	26	6ea	—	39
100	80	7ea	—	—	120	11	
Kodak (711 Kodak)	Brownie 127 camera outfit	39	11ea	10	6ea	71	11
	movie film Ektachrome II	projectors	—	—	—	—	—
Instantatic	M70-L	845	0ea	—	—	1300	0
	M80-L	975	0ea	—	—	1500	0
old models	Labiton (718 LAB)	approx. 8oz	51	0	14	2	6
	approx. 26oz	150	0	42	0	20	3
Lactocalamine (324 Crookes)	cream	50gm	28	0	7	8½	4
	28gm	—	—	—	—	—	—
potassium bicarbonate	300mgm	1000	38	5ea	—	—	—
	500mgm	1000	43	2ea	—	—	—
1gm	1000	84	0ea	—	—	—	—
	Lectro-caps (1429 TL)	lithium carbonate	300mgm	1000	45	7ea	—
potassium chloride	500mgm	1000	40	10ea	—	—	—
	1gm	1000	74	5ea	—	—	—
sodium bicarbonate	500mgm	1000	36	0ea	—	—	—
	850mgm	1000	54	0ea	—	—	—
1gm	1000	60	0ea	—	—	—	—
	2gm	1000	90	0ea	—	—	—
sodium bicarbonate	500mgm & potassium bicarbonate	500mgm	1000	81	7ea	—	—
	sodium fluoride	10mgm	1000	36	0ea	—	—
sodium chloride	250mgm	1000	37	2ea	—	—	—
	500mgm	1000	40	10ea	—	—	—
750mgm	1000	48	0ea	—	—	—	—
	1gm	1000	74	5ea	—	—	—
1-25gm	1000	90	0ea	—	—	—	—
	1-5gm	1000	93	7ea	—	—	—
Less (528 GM)	toothpaste	16	7	4	7	2	3
	Levenor (1530 Fisons)	Lidothesin (1341 Willows) existing entry	—	—	—	—	—
Lidothesin (1341 Willows)	plain or with	adrenaline	1-100,000 or 1-200,000	—	—	—	—
	injection vial	0.5%, 1% & 2%	20mils	6	9ea	—	9
50mils	6	11	9ea	—	15	8	
	250mils	12	4ea	—	16	6	
ampoules	2mils	100	27	9ea	—	37	9
	5mils	50	27	9ea	—	37	0
10mils	25	27	9ea	—	37	0	
	20mils	6	17	8ea	—	23	8
25mils	6	17	8ea	—	23	8	
	cartridges	2mils	100	22	11ea	—	30
topical 4%	25mils	3	7ea	—	5	5	
	gel 1% antiseptic	15mils	30	0	—	3	9
2% antiseptic	15mils	30	0	—	3	9	
	Limmits (1552 UL)	plain chocolate meal	20	3	3	4½	2
Locasol (1247 Trufood)	14oz	100	0	—	10	6	
	3lb	314	6	—	32	9	
Lustre Dent (280 CP) 5 pack minimum order	standard	3	2	9	0	2	3½
	(2 doz)	(2 doz)	(2 doz)	(2 doz)	(2 doz)	(2 doz)	(2 doz)
large	24	0	6	7	3	4	
	(1 doz)	(1 doz)	(1 doz)	(1 doz)	(1 doz)	(1 doz)	(1 doz)
Mavala (664 J5 & C.)	cuticle cream	120	0	33	0	18	0
	scientific hardener	33	8	9	3	5	0
discovery pack	Mellow Blossoms (280 CP) 5 pack minimum order	42	8	11	7	1	1½
	toilet soap (4)	(1 gross)	(1 gross)	(1 gross)	(1 gross)	(1 gross)	(1 gross)
Melody (412 Elida)	hair colourant	45	1	12	5	6	8
	Mennen (525 Golden)	Cologne	59	0	16	3	8
Mentasol (509 Gibbs)	toothpaste	standard	17	9	4	10½	2
	large	25	2	6	11	3	5
Minafen (1249 Trufood)	16oz	301	0	—	33	6	
	3lb	885	0	—	98	3	
Minivite (727 Lane)	capsules	64	96	0	—	12	6
	Monica Smart (856 M5C) existing entry	deodorant (roll ball)	28	4	7	8	4
Monica Smart (856 M5C)	eyebrow pencil	9	5	2	7	1	6
	face powder	15	8	4	4	2	6
lipstick	31	5	8	7	5	0	
	skintone foundation	70	8	19	4	10	0
talcum	33	0	9	0	5	6	
	Morpha (1305 WB) †s1DD	ampoules No. 1	100	84	0ea	—	126
Mydrilate (1305 WB)	solution 0.5%	12×5mils	44	0ea	—	66	0
	1%	12×5mils	48	0ea	—	72	0
Neo-Hepatex (394 DF)	Nu-soft (810 Maw)	cotton wool puffs	36	0	—	1	6
	(3 doz)	19	1	5	3	2	8
Nutriline (509 Gibbs)	31	4	8	7½	4	4	
	Odol (314 Cranbux) existing entry	(distributors 528 GM)	mouthwash	45cc	27	6	7
Odol (314 Cranbux)	85cc	48	0	13	4	6	8
	toothpaste	61gm	18	0	4	11	2
107gm	32	4	8	11	4	6	
	Optone (690 Keldon)	eye drops	large	37	5	10	1
Palmolive (280 CP) 5 pack minimum order	after shave lotion	17	7	4	10		
	pre-electric shave	(½ doz)	(½ doz)	(½ doz)	(½ doz)	(½ doz)	(½ doz)
rapid shave	21	11	6	0			
	shampoo	24	4	6	8		
shave cream lather or brushless	tube	21	8	5	11		
	jar	17	7	4	10		
shaving stick refill	soap green regular	47	4	12	11		
	bath	50	10	(6 doz)	(6 doz)	(6 doz)	(6 doz)
family	(4 doz)	(4 doz)	(4 doz)	(4 doz)	(4 doz)	(4 doz)	(4 doz)
	gold regular	56	6	15	5		
bath	(6 doz)	(6 doz)	(6 doz)	(6 doz)	(6 doz)	(6 doz)	(6 doz)
	Pandora (1590 Setatome) (distributors 845 GM)	Panolog (1176 Squibb) TSVP0 ointment (vet.) 5cc	6	6ea	—	—	—
Pears (509 Gibbs)	baby powder	16	11	4	8		
	transparent soap	9	2	2	6½		
Pepsodent (509 Gibbs)	toothpaste	standard	17	2	4	8½	
	large	24	7	6	9		
Pernomol (718 LAB)	economy	32	9	9	0		
	Photopia (980 Photopia)	exposure meter	—	—	—	—	—
Pin-up (412 Elida)	home perm end-curl	38	2	10	6		
	full-head	58	6	16	1		
Plus (1565 P. Plus)	flashgun	—	—	—	—	—	—
	sunblitz 1000	—	—	—	—	—	—
Polybactrin (128 Calmic) T5	cream	15gm	7	6ea	—	—	—
	H.C. cream	15gm	11	6ea	—	—	—
Potaba (521 Glenwood)	capsules	240	48	9ea	—	—	—
	Envules	1000	184	2ea	—	—	—
tablets	120	21	4ea	—	—	—	—
	1000	148	2ea	—	—	—	—
Procelium (1530 Fisons)	ointment	—	—	—	—	—	—
	Prosol (1249 Trufood)	16oz	81	0	—	—	—
Prurex (1530 Fisons)	Quixalud (1176 Squibb)	dispersable powder (vet.)	240gm	25	0ea	—	—
	1-2 kilo	108	4ea	—	—	—	—
Regula (980 Photopia)	flash unit AG	—	—	—	—	—	—
	Remiderm (1176 Squibb)	cream (vet.)	—	—	—	—	—
TSVP0	5gm	42	0	—	—	—	—
	Ricoh (817 MP5)	Ricoh (565 Hanimex)	—	—	—	—	—
Rinural (1310 WVV) † DD1	linctus	125mils	56	0	15	0	
	Rubrafer Improved (1176 Squibb) (vet.) vial 50 dose	45	0ea	—	—	—	—
Rynabond (1530 Fisons) †s7	tablets	30	108	0	29	8½	
	syrup	40z	69	0	19	0	
Sankyo (1343 DW)	projector Dualux	—	—	—	—	—	—
	Sorbidel (1531 Delandale) (distributors 1077 Rona)	Soval (235 Carteret)	tablets	21	9	6	0
Ster-zac (626 HH & C) existing entry	anti-bacterial soap	squeeze pack 14oz	4	8ea	1	3ea	
	dispenser pack	16oz	10	0ea	2	9ea	
bath concentrate	sachets	50×3mils	14	6ea	—	—	—
	12×10z	11	6ea	—	—	—	—
144×10z	120	0ea	—	—	—	—	—
	500mils	10	6ea	—	—	—	—

AMENDMENTS AND ADDITIONS TO KEY TO SUPPLIERS

108 Bell = **Bell & Sons, Ltd.**, Link Road, Huyton, Liverpool. Huyton 6206.

265 Clairor = **Clairor, Ltd.**, Stamford House, Station Road, Langley, Bucks. Slough 43261.

412 Elida = **Elida, Ltd.**, P.O. Box I.D.Y., 43 Portman Square, London, W.1. Hunter 1200.

509 Gibbs = **Gibbs Proprietaries, Ltd.**, P.O. Box I.D.Y., Hesketh House, Portman Square, London, W.1. Hunter 1200.

817 MP5 = **Mayfair Photographic Suppliers, Ltd.**, Hempsalls Lane, Newcastle, Staffs. Newcastle 65131.

839 Mesco = **Mesco Laboratories, Ltd.**, 10 Holywell Lane, London, E.C.2. Shoreditch 2185.

1117 Scrivens = **Scrivens, Ltd.**, Daimler House, Paradise Street, Birmingham, 1. Midland 7975.

1531 Delandade = **Delandade Laboratories, Ltd.**, 24 Kilburn High Road, London, N.W.6.

Prices are given in the sequence Trade Price per Doz.; Purchase Tax per Doz.; Retail Price. Bold upright figures (2 9) in the retail price column indicate that the price is subject to resale price maintenance; italic figures (2 9) that it is recommended by the manufacturers; and light upright figures (2 9) that it is "notional" as a guide to the retailer in determining his own retail price.

Syl-A (1176 Squibb)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
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C	Juvanail (353 DP)	20	0	5	6	3	0
D	Layla (1372 CCL)						
I	Layla (1000 PPL)						
I	Leucodinin (819 McY)						
	ointment	1oz	14	9ea	4	0½ea	23 11
I	Lipostabil (894 Nicholas)						
	capsules	60	136	0	37	5	20 1
D	Lynoral (917 Organon)						
	tablets	0.01mgm	25				
D		0.02mgm	25				
D		0.05mgm	25				
D		0.1mgm	25				
D		1.0mgm	25				
D	Menformon (917 Organon)						
	tablets	0.1mgm	25, 100 & 500				
D		0.3mgm	25				
D		1.0mgm	25				
D		5.0mgm	25				
I	Merveilleuse (Rigaud) (47 Anestan)						
	perfumed Cologne	4oz	26	6ea	7	4½ea	53 9
	standard	8oz	43	6ea	11	11ea	88 0
	spray	3oz	38	6ea	10	7ea	78 0
	refill	3oz	23	6ea	6	5ea	47 6
D	Methyltestosterone (917 Organon)						
	Sublings	5mgm	25				
D		10mgm	25				
D		50mgm	25				
•	Minolta (667 JCL)						
	camera	16MG				703	1
•	Neo-Hornbreol (917 Organon)						
	ampoules	25mgm	3				
D		50mgm	3				
D		100mgm	3				
•	Neosporin (208 BW) T5						
	eye drops	5mils	60	0		7	6

D	Oradexon (917 Organon)						
	tablets	0.5mgm	30				
D		0.75mgm	30				
•	Otrivine-Antisein (262 CIBA)						
	eye drops	10mils	60	0		7	6
•	Ovestin (917 Organon)						
	injection	1mgm	2				
D	Pardale (346 Dales) †sDDI						
•	paediatric elixir	50mils	4	0ea			
		250mils	12	0ea			
•	Penidural (1352 Wyeth) T5						
	oral suspension	250	mils	hospitals only			
C	Pernaemon (917 Organon)						
	fort ampoules	1	mil	3			
D	Personna (438 ER)						
•	wall-clip shaving set	84	6	23	4	12	6

A = Price Advanced
R = Price reduced
• = New entry
D = Delete
C = Correction
I = Insert

•	Petronet (1127 Seton)						
	(distributors 93 BJ)						
I	dressing strip	3½in × 8yd	72	0			
•	Pregnyl (917 Organon)						
	ampoules	100iu	3				
D	Progestin (917 Organon)						
	ampoules	10mgm	3, 12 & 25				
D		25mgm	3, 12 & 25				

D	Progesterol (917 Organon)						
	tablets	5mgm	25				
D		10mgm	25				
D		25mgm	25				
R	Radiomulsin (179 BDH)						
		115mils	38	0			
		500mils	138	0			
		2 litres	39	0ea			
R	Robitussin A-C (1071 Robins) †s7DDI						
		20oz	38	4ea			
•	Score (172 BMCL)						
	hair dressing	38gm	22	6	5	4	
		80gm	36	2	9	6	
C	Tabloid (208 BW)						
	quinidine sulphate	0.2gm	100	60	0ea		
I	Un Air Embaume (Rigaud) (47 Anestan)						
	perfume standard	1oz	9	9ea	2	8ea	
		1oz	25	0ea	6	10ea	
		1oz	36	0ea	9	11ea	
		1oz	50	0ea	13	9ea	
	de-luxe	1oz	47	6ea	13	1ea	
		1oz	66	0ea	18	2ea	
	super de-luxe	1oz	156	0ea	43	0ea	
	spray	1oz	18	0ea	5	0ea	
	refill	1oz	12	0ea	3	4ea	
	toilet water	2oz	19	0ea	5	3ea	
	standard	4oz	30	0ea	8	3ea	
		8oz	54	0ea	14	10ea	
		32oz	260	0ea	71	6ea	
	spray	3oz	39	0ea	10	9ea	
	refill	3oz	23	6ea	6	5ea	

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